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SECOND UNITED NATIONS CONFERENCE ON THE LEAST DEVELOPED COUNTRIES:

Preparatory process for the Conference

OVERCOMING OBSTACLES TO INSTITUTIONAL DEVELOPMENT IN THE LEAST DEVELOPED COUNTRIES

Contribution by the Department of International
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Overcoming obstacles to institutional development in the least developed countries

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Introduction

At its thirty-sixth session, the General Assembly endorsed the Substantial New Programme of Action for the 1980s for the Least Developed Countries and called upon all Member States and all others concerned to contribute to the implementation of the Programme.

The General Assembly decided also that regular review and monitoring of the progress in the implementation of the Programme of national, regional and global levels should be undertaken.

The present report was prepared in pursuance of the above-mentioned decisions of the General Assembly. It analyses institutional development in a number of the least developed countries where relative progress has been achieved in solving some social and economic problems.

The choice of institutions as an object of investigation is based on the following assumptions. Institutions are social organisations with a defined purpose which emerge, develop, diversify or become extinct in response to individual and social needs. They are as diverse as parliaments and bureaucracies, corporations and markets, universities and schools, courts and the police, land tenure systems and trade unions and laws and conventions. Some of them, such as laws and conventions, very much determine rules and regulations which govern relations between persons and groups of persons. Others such as land tenure systems and trade unions contribute to the

determination of the manner in which social output is divided between those contributing to that output. Still others are mechanisms for organizing production and distribution. Finally, there are those instituted to perform specified tasks, e.g. to manage a construction project, conduct higher education or punish criminals.

The nature of institutions vary among societies and from time to time. Some societies are governed by authoritarian rule, others by elected parliaments, some change from one to the other. Privately held joint stock companies are a dominant form of enterprise in some whereas state owned corporations or individual ownership is common in others. In all societies, institutions are the outcome of the exercise of human ingenuity in response to individual and social needs. In the course of economic and social development, many institutional forms have been borrowed by late comers and established in the latter societies to pursue perceived desirable objectives. Many developing countries have adopted and adapted economic and social development institutions from the older industrial countries. Many have developed their own, indigenous institution for purposes of development. There have been both success and failure in the adoption and adaptation of institutions from other societies and in the development of indigenous institutions for purposes of development. There is a widespread but yet wholly inarticulate impression that the fabric of institutions supporting development in the least developed countries has been a strong determinant of the under-development of these economies. It is this objective of this exercise to articulate these impressions more clearly in order that the nature of the shortcomings and the means for improving their functioning can be debated somewhat more clearly than hitherto.

Regarding institutions as "an habitual method of responding to the stimuli" which changing circumstances afford, the report attempted to trace the development of institutions and assess the degree of success with which they have responded to the needs of society, account for inadequacy in that degree and bring out reasons for such.

By comparing different strands of information, albeit incomplete and non-systematic, it might be possible to indicate ways in which obstacles to institutional development can be overcome in the least developed countries.

The report attempted to apply two available concepts to analyse institutional development: the concept of institutional effectiveness and the concept of efficiency.

The effectiveness of institutions can be measured by the ability of an institution to define and agree on its appropriate operational objectives, as well as by its capacity to implement them with regard to its own set of standards. It can also be justified on the basis of standards external to them, for example, by an effect of institutions on individuals, or by an institutional impact on societal systems.

The efficiency of institutions refers only to the way in which the resources available are used. It can be measured by the capacity of an institution to maximize output with a given set of inputs.

The report deals mainly with those institutions which are implementing social and economic goals in the least developed countries. However, other institutions, such as: establishing social, political, economic and cultural norms, laws and regulations, and governing domestic and external relations within the basic rules of society, are also taken into account. They constitute the environment in which the institutions under consideration of the report are operating.

L. Hassan
28 February 1990

Chapter I

School systems and higher institutions in the least developed countries

Lack of educated and qualified manpower is a crucial constraint to the economic development of the least developed countries (LDCs). Cadres of skilled workers, professionals and the institutions to prepare them need to be built, augmented, and strengthened. The improvement of the quality of manpower in the LDCs through policies of human resources development depends particularly on education and training in required skills.

Like all developing nations, the LDCs governments invested heavily in mass schooling after achieving independence. Despite improvements, a growing number of children are not in school, the number of illiterate adults is increasing, and the unmet needs for basic knowledge and skills continue to accumulate in the LDCs. These needs are expanding so fast because of rapid population growth and urbanization, high rates of migration, and all the far-reaching economic, social, political and cultural changes. The greatest contribution to reducing educational poverty among the young is, the reorganization of educational institutions to bring the teaching and learning process into closer relation with local learning needs and possibilities of school attendance and thereby to reduce the dropout rate. Schools and universities as institutions may change their role in response to a changing environment. Improving the efficiency and effectiveness of these institutions with the support of a network of institutions is a crucial challenge for nations of the LDCS. This section will identify and describe some institutional obstacles of the school systems and universities in the LDCs and

the experiences of some countries to overcome some of the obstacles. Comparative international statistics and country' experiences will be used for illustration wherever possible.

A. Development of education

Some of the LDCs in Africa and Asia have a long history of indigenous education which was offered by all ethnic and linguistic groups. Through indigenous education, attitudes and skills appropriate for male and female social roles were emphasized and transmitted from one culture to the other. Religious bodies - especially Christian, Islamic and Buddhist ones - have also been active in the education system of many LDCs.

The contribution of the Christian churches to education is well known in most of the LDCs, with roots extending back long before the colonial period. In many cases, Western-type formal schooling began with the work of the Christian missions by establishing comprehensive systems of education (for example, like in Ethiopia and Malawi) and only later did governments supplement and take over the missionaries' work. Another major antecedent to the colonial period is the influence of Islamic bodies which have also been active both in the traditional Koranic schooling and in education based on Western model. 1/ Both formal and non-formal school systems were established to teach the ethics and theology of Islam.

The economic changes that the colonial powers set in motion in the LDCs helped create a demand for Western-style education. There was a widespread practice of transplanting models from industrialized to developing countries which could not fit an individual country's actual needs, circumstances and resources. Significant differences in educational access and participation

existed between urban and rural populations, sexes and members of different ethnic or religious groups within the colonial territories. The school systems and the few universities inherited by almost all of the LDCs at the time of independence were inadequate and inappropriate to the needs and aspirations of the new independent nations. Many countries, including Gambia, Somalia and Tanzania, had over 90 per cent illiteracy rates at the time of independence.

After independence, significant changes have occurred. Nationalization of the curriculum has been widespread, especially in primary education. Texts have been adapted and new texts written so that basic skills are now taught with reference to national customs, the local environment and the area's own history. A consistent theme in each of the LDCs' development policy has been the integration of all its geographic regions and ethnic groups in the national development. This imperative move is more pronounced in the primary education system, which is popularly perceived to be the main route to reaping a fair share of benefits from the national development process, as well as for developing tools for self-improvement. The demand for equal education opportunity for all groups has been translated into specific goals of educational policies in most of the LDCs, such as the universal use of one native language as the medium of instruction and universal primary education.

Adult illiteracy has decreased extensively in almost all LDCs. Between 1970 and 1985, decreases of 20 per cent were achieved in Botswana, the Central African Republic, Democratic Yemen, Ethiopia, Guinea-Bissau and the Lao People's Democratic Republic. The average literacy rate for all LDCs increased steadily from 1970 to 1985 (see table 1). However, the absolute

number of illiterate adolescents and adults (aged 15 or older) in the LDCs grew from 95.2 million in 1970 to 112.6 million in 1985. This trend persisted during the first half of the 1980s, even though the average illiteracy rate decreased by 5.2 per cent for all LDCs, while the number of illiterates increased by 2.3 million.

The difference between male and female illiteracy rates averages 21.5 percentage points (see table 2). The combined effects of low literacy rates in general and gender inequalities in literacy rates tends to be quite disastrous for women in the LDCs.

The expansion of primary school enrolment in the LDCs is noteworthy, although it is still low compared to other developing countries and to world standards. This expansion continued during the second half of the 1970s, mainly as a result of sustained effort to implement universal primary education (see table 1). In the mid-1980s, the slowing down of enrolment growth affected all levels of education in the LDCs but was most evident at the primary level. According to UNESCO's education projections for the year 2000, 27 developing countries (as compared to 38 in 1985) are projected as having gross enrolment ratios for primary education below 90 per cent. Nineteen of these twenty seven countries are in Africa and seven are in Asia. Twenty one of these twenty seven countries belong to the LDCs. 2/

Approximately 105 million school-age children (six to eleven years old) were not participating in formal education, according to UNESCO's 1985 estimates. About 70.2 per cent of these children were in the LDCs and 60 per cent were girls. If current trends continue, by the year 2000, the number of out-of-school children will almost double to approximately 200 million.

The desired effects of investments at the basic education level include initial access, continued participation, equity for disadvantaged populations, and learning achievement. All of these are of a great concern in all LDCs.

Many students drop out before completing their primary schooling, others complete school but fail to acquire the necessary learning. In Bangladesh, only one out of five students entering the school system emerges literate. Children who drop out before completing primary education inevitably lapse into illiteracy, if they are not provided learning opportunities through literacy and post-literacy programmes. In addition, whatever their previous formal education, significant parts of the adult population have yet to acquire the basic knowledge and life skills that, in addition to literacy, would improve the quality of their lives at home, in their communities, and in support of their nations. The vicious cycle of low enrolment and high drop-out rates in primary education is more common in the rural areas and among women.

Declines in school enrolment reflect the economic stagnation and the rapid population growth in the LDCs. Children who might have attended school in better times are kept out or pulled out to help work at home. In addition, many countries have introduced or raised fees just as family income has dropped, and for families, the benefits of education, may have fallen as a result of the continuous economic stagnation.

The principal problems in education in the LDCs today are stagnating enrolments and declining quality.

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B. Educational Finance

The share of education in total GDP averages 6 per cent in industrial countries and 4 per cent in the developing countries as a whole. Ten LDCs spend 5 per cent or more of their GDP on education. 3/ Most of the other LDCs spend less than 4 per cent, while Bangladesh, Haiti, Lao's People's Democratic Republic, the Maldives and Uganda spend less than 2 per cent. In most of the LDCs, education takes more than 10 per cent of the government budget, with this share reaching 15 per cent in the case of Botswana, Burkina Faso, Burundi, the Central African Republic, the Comoros, Democratic Yemen, Mali, Niger, Rwanda, Togo and the United Republic of Tanzania.

The critical question in public education is how educational resources should be divided between different types and levels of education. Studies on rates of return in investment priorities in education generally show that the highest private returns to investment are in primary education. 4/ Social returns are probably even greater, taking into account the importance of primary education in imparting a critical marginal increase in both cognitive and non-cognitive areas of learning. Primary education reduces the manifold disadvantages suffered by poor people, enabling them to make the most of a poor environment both in their lifestyles and in their work. Furthermore, primary enrolment in the LDCs accounts for between 80 and 90 per cent of total enrolment, but most of these countries spend only 40 to 50 per cent of their education budget on primary education. This reflects the higher unit costs of secondary and tertiary schools. Most LDCs spend between 20 and 30 per cent of their education budget on higher education alone, which has only about 1 per cent of total enrolment (and where the gross enrolment ratio is only between 1

and 2 per cent (see table 3). Moreover, in 57 per cent of the LDCs, recurrent expenditures per primary school child at constant prices have deteriorated between 1980 and 1985. 5/

Recent research has raised the issue of efficiency in the delivery of education in the LDCs. As static recurrent budgets are spread over a burgeoning number of students, educational spending steadily erodes. During periods of budget squeeze, it is quite likely that the quality of education is traded off in the quality-quantity choice. Where educational standards have deteriorated the most, there is no longer an either-or choice between expansion and quality. Without some minimal package of basic inputs, including textbooks and other instructional materials, virtually no learning will take place.

C. Deterioration of Quality of Education

Five internal factors in particular strongly influence the quality, relevance and effectiveness of education: teachers; facilities; instructional materials; school buildings and the language of instruction; and a strong examination system. The predominant influence on student learning is the quality of the schools and teachers to which students are exposed. 6/ The quality of education and the learning process depend on the competence, personality and dedication of the teacher. They also depend on the conditions under which the teacher and students are working - for example, on whether the size of the class is manageable and its atmosphere is conducive to learning, and whether there is an ample supply of equipment, textbooks, and other learning materials. Not least they also depend on the characteristics of the students themselves - on whether they are well nourished, physically and mentally healthy, and strongly motivated to learn.

If inputs into the system are used as indicators, then the quality of the educational institutions have deteriorated in most of the LDCs. Classes especially in urban areas, have become more crowded, often with a poorly-trained and demoralized teacher trying to keep order, and with few if any textbooks or other essential supplies and equipment to boost the teacher's productivity. Some countries - Ethiopia as an example - adopted double and triple shifts in their primary schools, and sometimes even four daily shifts in secondary schools.

A number of studies 7/ suggest that changes in class size influence pupil achievement modestly or not at all. But where teachers are poorly qualified, the larger the pupil-teacher ratio, the lower would be the quality of education. During the 1980-85 period, several countries have significantly increased class size (see table 3). The countries with the highest student-teacher ratios are Chad (71:1), Central African Republic (66:1), Malawi (61:1), Burkina Faso (58:1), Burundi and Rwanda (56:1). Countries like Somalia (20:1), Lao People's Democratic Republic (25:1), Benin (33:1), Mali and Tanzania have the lowest student-teacher ratios. Some reduce class size by double shifting or even more and some countries, like in the case of Somalia, which may have low pupil-teacher ratios did not apparently improve the internal efficiency (only one-third of entering students complete primary school), but it is because of the government policy of hiring all graduates of teacher training colleges hoping to get on the civil service payroll.

The level of education, content of the training and the number of years of experience are the traditional factors associated with the quality of teachers. Primary school teachers' pre-service training which consists of more than general secondary education and a minimum exposure to pedagogical

theory is not cost-effective, especially for LDCs. Long residential courses tend to be expensive to produce and teachers' salaries are usually closely tied to the amount of training received. In recognition of these two factors, policy makers in Burkina Faso have chosen to shorten the duration of pre-service training for primary school teachers.

In Tanzania, the Ministry of National Education has adopted several emergency measures to improve the quality of teachers during the universal primary education expansion. The most important measure, however, was the use of distance teaching through correspondence education, supplemented by radio and tutorial sessions. Trainees were examined each term and a final national examination was administered at the end of a three-year course. The scheme did produce some 35,000 teachers in three years. 8/ A comparison of these trainees with a control group who attended a regular teacher programme found that the first group performed slightly worse on academic knowledge but they were more effective in the classrooms than their conventionally-trained contemporaries. Furthermore, the strategy realized important savings, since teachers were employed during their training period and the costs of residence at the training college were minimized. The cost of the distance teaching strategy in Tanzania was calculated to be approximately one-quarter the cost of conventional teacher training. 9/

In many LDCs, an emphasis on in-service training over pre-service training has been found to be cost-effective, provided that there is constructive supervision of the training. Some countries (for example, Botswana, Lesotho and Malawi) are now successfully using distance teaching methods to upgrade pertinent knowledge and skills of incumbent teachers.

Values are conveyed by the inner logic of institutions and the way they operate. Teachers convey values by how they behave and how they react to situations, rather than by delivering what the curriculum prescribes. One of the obstacles to improved teaching appears to be the difficulty of attracting and retaining people in the teaching profession. This has its roots in remuneration, conditions of service, and the social status of teaching as a profession. Lifting teachers' morale is a great challenge for LDCs since most of them cannot afford additional money incentives. Increased supply of textbooks, equipment and other learning materials, strengthened inspection and supervision from inspectorates, and better support from ministries will help improve working conditions, particularly for the many teachers who must work in rural areas. Research shows that communities which are able to make their teachers feel valued and productive by giving them a high level of support are more likely to attract and retain well-qualified teachers than are other communities.

The provision of instructional materials, particularly textbooks, is the most cost-effective way of improving the quality of learning institutions. The scarcity of learning materials is a serious institutional constraint to the educational effectiveness in the LDCs. For example in rural Mali, there are only six textbooks per 100 students, and in seven out of 20 schools, no textbooks at all. An appropriate and adequate supply of textbooks has a greater effect than lowering student-teacher ratios or raising the percentage of qualified teachers. The current budgetary crisis has aggravated the problems of those governments which have policies of providing free textbooks and the result is severe textbook shortages, especially in rural areas. Some countries have transferred the costs of these basic supplies to the parents.

Learning activities in clubs and libraries and radio broadcasts to the classroom have also proved to be effective in some countries (for example, Ethiopia and Tanzania).

Low-standard dilapidated buildings and poorly-maintained facilities have an effect on pupils' attendance. The current financial crisis has aggravated the problems of inadequate plant maintenance and missing or broken furniture because, in most of the LDCs, the responsibility for maintenance rests with the central government. In order to minimize their direct assistance, some governments rely on self-help schemes to mobilize local resources. There have been successful projects with appropriate technical assistance to communities to ensure that buildings are durably constructed. For example, in Afghanistan, the authorities noted that traditional mud roofs sometimes leaked or collapsed during a heavy rainfall and recommended the insertion of a thin sheet of plastic to solve the problem, 10/ and, in Bangladesh, plastic resins were mixed with jute for improved roofs and wells.11/ Strategies to increase teacher utilization would be facilitated in the future through the choice of appropriate construction designs by using local materials to reduce building costs which would facilitate the transfer of responsibility for primary school construction and maintenance from the central to local communities. In many cases, greater reliance on local materials is also a way of improving the quality of construction. 12/ For example, in Niger, the cost of a classroom made of concrete is five times that of one made of banco, the most commonly-used construction material in rural areas.

The quality of secondary education is also a great concern. As in the case of primary education, essential non-salary recurrent inputs are not adequate. The biggest challenge will be expansion - how to satisfy the

burgeoning demand for a limited number of secondary school places. The earlier expansion of primary education in the LDCs resulted in an ever larger pool of primary school leavers, many of whom could no longer find jobs in the modern wage sector that they had come to expect. There is a strong economic rationale for expanding secondary education in the LDCs since the graduates of this institution provide medium and high-level manpower as long as hard measures are taken to improve the efficiency and equity of the systems. Efficiency can be improved within the existing institution through more effective utilization of teachers and capital. Measures to increase student-teacher ratios at the secondary levels by increasing class size and teaching loads, through double shifts and longer school years, and through multi-subject specification of teachers could substantially reduce unit cost. Properly-designed distance education projects which combine the strengths of different media - "print for permanence, broadcasting for immediacy, face-to-face learning for individuality and feedback" 13/ could also reduce the unit cost of this institution. The essence of distance education is that a small number of teachers produce course materials that are disseminated as printed materials, through broadcasts, or through some other medium and do not bring students into supervised classrooms.

Distance education has helped increase opportunities for secondary education in Malawi. 14/ The Malawi Correspondence College (MCC), which was created in 1965, evolved gradually over twenty years as the government recognized that it offered a relatively inexpensive way of responding to the growing demand for secondary education. MCC centres are generally located in simple buildings, often constructed by the community next to a primary school, and are frequently accompanied by simple housing facilities for students and

teachers. In some cases, centres make use of primary school buildings and regular secondary schools in the late afternoons and evenings. Teachers' salaries are paid by local education authorities who are responsible for the general supervision of the classes. Recent studies have shown that the annual cost per student at the MCC is much lower than that of government secondary schools because of low salaries paid to teachers, higher student-teacher ratios, and lower operating boarding costs. Even though only 20 per cent of MCC students pass the National Junior Certificate Examination, compared to 85 per cent in regular schools, the cost per graduate is still lower than that of regular secondary schools. In order to ensure that the MCC meets demands for secondary level training, the government is strengthening staff at MCC headquarters, establishing programmes to upgrade the skills of MCC teachers, and improving the physical facilities of MCC centres.

In response to economic, social and political pressures, vocational education was often viewed as the solution to educational problems in the LDCs. It was believed that many educational problems could be solved by diversifying the secondary education curriculum: the unbridled demand for higher education could be controlled, the financial crisis in education would be eased by reducing higher education budgets, and unemployment among college and secondary school graduates would be reduced. Various types and models of specialized secondary training institutions, mostly imported, have been created in several countries to meet different middle-level manpower needs. Pre-vocational courses have been added to traditional academic programmes in an attempt to instil the concept of self-reliance. But the efficiency of technical and vocational schools, compared with on-the-job training, has been questioned. In most of these largely rural societies of the LDCs, farming,

industrial and commercial sectors are not sufficiently developed to utilize the advanced technology generally taught in schools; the modern sector (both public and private) is less and less able to create jobs; and there are weak links between schools and work. A study on Bangladesh found that as many as two-thirds of the graduates of vocational and technical education were unemployed. 15/ In many LDCs, the per student cost of specialized vocational education provided in schools has been at least twice that of general education, yet the employment and earning experience of the systems has been much the same. Some researchers emphasize the costliness of diversified institutions and its inability to attract competent teachers and suitable equipment. 16/ They also warn that the overall quality of education may decline so that graduates will be proficient in neither academic knowledge nor specialized vocational skills. As a result, they will be less able to acquire skills on the job. Another factor is that academic education prepares graduates for numerous careers that require verbal and quantitative skills; professional or vocational education prepares the graduate for a more specific type of job in a single field; work-based training generally prepares the individual for only a single job. Thus, there is an urgent need to review existing vocational school programmes and to consider the feasibility of various alternatives, including on-the-job training, other in-service skill development programmes, and industrial training centres. Employment-based training in factories and industries makes such training more relevant to the content of the vocation in the sense that these institutions are closer to technological development in their field.

A major reason why the vocationalization of school curricula has failed in some of the LDCs is because there is currently a lack of real demand for

vocational courses. Students are often forced to follow a vocational track because the academic track is constrained. The answer to the demand side will depend on the structure of incentives for vocationally-trained graduates, and whether the economies of the LDCs will be able to provide enough jobs for all those vocationally-trained people. Therefore, there is a clear need for most of the LDCs to review their policies of vocationalization of secondary schools and to use some criteria for at least some efficiency and equity in view of the financial crisis plaguing their economies.

D. Higher Institutions

Tertiary institutions prepare individuals needed to fill high-level positions in government, in business and in professions. The central role of these institutions is to support the elite leadership of a nation with research, advice and consultancy. One of the most important functions of higher institutions is the preparation of teachers, scholars and managers for the education sector itself for its most advanced teaching and research functions. 17/ These people are the core of national capacity for producing trained manpower, setting standards, maintaining quality and adjusting the education system to changing circumstances. Higher institutions, therefore, are of paramount importance for the LDCs' future. Greater investment in higher institutions in the LDCs is often justified in terms of the manpower requirements of the economy.

In order to make these institutions more relevant to the national needs, many LDCs attempt to re-orient students among the different fields of study and to reform courses and programmes with a view to enhancing their practical utility. The general aim of the reform of higher institutions is the

expansion of professional training with a direct impact on development. Such a reform generally involves the creation of university institutes for economics, engineering, technical sciences, transport, agriculture, administration, law, etc. Some LDCs, such as Benin, Burkina Faso, Burundi, Ethiopia, Malawi, Mali, Rwanda, Somalia and Sudan have established, within their academic institutions, departments concerned with subjects such as agricultural development, forestry, zoo-technology and livestock administration and management. 18/

Despite many LDCs' efforts to improve higher education, these institutions' contributions to development are now being threatened by many interrelated obstacles. First, the quality of these institutions in the LDCs have deteriorated. One aspect of this deterioration is over-enrolment in less rigorous fields of study. Another one is that during this period of financial crisis, many higher educational institutions lack the necessary inputs, such as equipment, laboratory, spare parts, supplies, multiple copies of textbooks, journals and monographs in university libraries. Second, the cost per student of higher public education is very high, including students' living costs, which are entirely financed out of the public budget. As was mentioned earlier, subsidies for higher institutions in LDCs are much greater than at lower levels, especially that of primary education. Thus, the very small percentage of the population able to gain access to higher education receives a large share of the education budget. As a result, resources are inefficiently allocated and income inequality has increased.

In almost all of the LDCs, only the state could provide the material and human resources required to establish and run higher institutions. Besides being a financial burden because of economic difficulties, governments can

sometimes assign too much and demand unrealistic functions. For example, according to the charter of the University of Juba in southern Sudan, it will be an instrument of: a) National integration; b) Social integration; c) Socio-economic development both for the southern region and for the nation at large; d) Environmental enlightenment and action; e) Cultural and technical enlightenment; f) Modernisation of the university organization, admission and administration; g) Horizontal transfer of modern technology and a vehicle of vertical transfer of improved indigenous technology; h) Regional and international co-operation and understanding.19/

The charter seems to imply that the university is supposed to haul the rest of the country out of its current technology and cultural status with a minimum teaching and administrative staff. The inability of most of these governments to make choices among university functions is a hindrance to the development of these institutions. The most important choice which can be made is that of academic quality. 20/

How high should a university set its goals? There are three possible categories of response:

(1) To disseminate existing knowledge;

(2) To participate in a dialogue with contributors to the production of new knowledge;

(3) To be recognized internationally as a contributor to new knowledge.

Most of the universities in many LDCs are able to deal only with the first level of quality. At the most, they are able to teach students to recognize concepts which typify common fields of endeavour and the terms which describe those concepts. The function actually being performed is the routine absorption of common knowledge.

There are basically three influences which determine the three levels of quality to which a university could aspire: the economy, the languages of instruction, and the choice of comparative advantage. Diversity and growth in an economy determine feasibility. Countries with a small, primary-product economy, such as those of Haiti, Nepal and Somalia, are constrained by the lack of economic diversity which could justify a diverse curriculum. Higher institutions of this kind cannot offer more than the first level of quality - which is the issue of awareness in the basic subjects.

Choice of languages for instruction will determine also whether a university will serve primarily local cultural functions or whether it will serve universal goals. It is very well accepted that a language should serve purposes of national cohesion and help to establish stronger linkages between the university and its constituent local communities. But, on the other hand, languages such as Swahili which is used in the universities of Tanzania but not used in international trade may handicap any university's chances to participate in the world of scholarships. One possible remedy is for universities to require students to use one international language, in addition to the local language of instruction, and to actively encourage multi-lingual presentations on the part of scholars.

At the higher institutions, the needs are more qualitative and the focus should be on the creation or development of centres of excellence, greater democratization of access of higher education as a whole through scholarship systems, the reorganization of entrance examinations to eliminate social bias, the provision of fellowships and grants for study at home or abroad especially for those who are unable to pay. It is essential to build up or develop a national research and training potential in higher institutions not only in

science, industry, agriculture and technology but also in the social, administrative and managerial disciplines depending on each country's development needs.

E. Support Systems

Although stagnating enrolment and low quality of schools and university institutions can ultimately be traced to demographic and economic problems, they are exacerbated by lack of support systems of supervision, management, and administration. Support systems are intended to ensure that no school is left without what it requires to function properly, to maintain national standards of teaching and learning, to minimize variability among schools and to monitor the well-being and progress of the entire system. In most of the LDCs, however, the quality of support through supervision and advice still seems to be deficient.

Particularly important in most school institutions are the qualities of the head teachers, for whatever the influences from outside may be, the enduring problems of day-to-day operations and control fall directly on them. Head teachers also play crucial roles in school committees and, therefore, need appropriate professional backgrounds and personalities. The quality of leadership provided by head teachers is substantially dependent on the quality of support they receive from their colleagues operating the administrative, supervisory and training systems.

Inefficiency in the educational institutions is seen in the widespread shortage support services, such as laboratories, libraries, workshop assistants, duplicating machines and other teaching aids, high levels of absenteeism of teachers and students. Administrative and logistical

infrastructures originally created for systems of quite limited sizes cannot cope with the vastly expanded structures of today. As a result, governments of LDCs are having difficulties in planning, implementing and monitoring policy changes that would address the obstacles to higher quality and wider coverage in the education system. Research has confirmed that the quality of a school is substantially dependent on the quality of leadership and personal management provided by the head teacher and senior colleagues. 21/ Many LDCs are short of trained and qualified middle-level administrators who could plan and manage educational institutions, train enough teachers, and deploy appropriate teaching staff to rural and remote areas. Shortages of technical personnel is a problem not only for the educational institutions but also for overall socio-economic development.

The structure of educational organizations can help support effective school management by granting schools the authority to generate and use local resources. Decentralization can, by supporting school autonomy, contribute significantly to better school management and increase the responsiveness of the school to the local community - and of the community to the school. Studies show that decentralization improves efficiency when public institutions, such as schools, are given greater responsibility for collecting users' charges and choosing how to spend the proceeds. It is essential that, particularly at the primary and secondary levels, individual local authorities be allowed to make their own decisions regarding staffing, capital expenditure and the provision of incentives regarding the structure and utilization of the teaching force, since they are likely to be more responsive than the central ministry to the dynamics of demographic changes, enrolment profile and staff turnover. Decentralization means greater flexibility in responding both to

local demands and to tightening financial constraints. However, a centralized system of education may be more efficient than a very decentralized one, if the wasteful duplication of effort in planning and administration between central ministry and local officials is avoided. In general, the central ministries should retain an important role in areas such as training policy, planning and monitoring functions, the setting of national education standards, and the provision of information about the benefits and costs of services. This type of centralization could bring eventually a better managed, more equitable and higher quality education service at all levels. In most of the LDCs, curriculum policy and development, together with the production of materials, is the responsibility of the ministry of education.

Centralized educational testing is an important element of the support system which, if properly designed, measures performance in the system as a whole and in individual districts and schools. Well-designed examinations also help improve the curricula. The improvement of educational curricula to make them relevant to current economic and social conditions will require the combination of modern knowledge and attitudes with traditional customs and values, using local languages and introducing productive and practical work into general education. Both curriculum improvement and performance measurement can in fact improve the quality of educational institutions.

Appropriate policy changes are necessary in the LDCs to improve the school systems and higher institutions, coupled with measures to strengthen management if the benefits are to be realized.

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F. Development of Managerial and Analytical Capacities

Institutional weakness of all levels of education is often attributed to a lack of trained manpower and weak management. Many LDCs have skilled manpower shortages and the case for training and technical assistance is difficult to challenge because of their financial situation. Management issues apply over the entire administration of learning - from the national establishment of standards to the design and implementation of local programmes. The monitoring and evaluation functions of management are very essential for the improvement of the quality of education.

Operating an educational institution, programme or system is a demanding job in any country. A large number of professionals covering a wide range of expertise are needed, especially in the LDCs, but are rarely available to analyze policy options, plan improvements and manage day-to-day operations. Staff with training and experience in policy analysis, project planning and evaluation are badly needed in many of these countries where their skills are essential for developing a true dialogue, on equal footing, with external partners. These managerial activities which are necessary concerns of schools and university institutions are not performed well because of poor management. Training has generally not been tied to clear long-term strategies for organizational development. Available trained staff are used badly because of poor incentives, inefficient organization of work, inappropriate delegation of responsibility and inadequate accountability.

Staff turnover in strategic posts, from the Minister of Education to directors, is too frequent in some of the LDCs. 22/ Frequent staff turnover has induced a feeling of insecurity and denial of the opportunity for

bureaucrats, who are either supportive or opposed to a policy, to over see its implementation and be in a position to evaluate its impact.

A broader policy approach to the development of managerial skills is needed in most countries which will require the development of strong managerial institutions. It is crucial that management development should be seen as a system-wide activity that promotes good managers from the schools through intermediate levels toward the centre. This requires training, the resources to make the staff effective, incentives to hold them in the system, clearly defined career paths, and systems for assessing performance.

All managerial functions require reliable, up-to-date and other information to a greater or lesser degree. However, there is a serious lack of sound information on education needs and how and to what extent these needs are met. Most LDCs need to develop their statistical services and management information system to provide relevant information to a wide range of professionals working at national, regional and local levels. An essential step to improve the capacity in this area is to establish or reinforce technical services and mechanisms to collect and analyze data on learning needs. Furthermore, there is a pressing need for research to clarify policy and pedagogical issues and applied research. First, research is needed on the cost, finance, and running of education and training systems. The second type of research involves surveys to assess the internal efficiency of education by strengthening the testing system. A third, relatively routine line of research deals with external efficiency , that is, with the assessment of the labour market performance of graduates of different levels and types of education. Such research requires appropriate data collection mechanisms and qualified scholars for mutual intellectual stimulation and criticism.

G. The Role of Community and Non-governmental Organizations

Public school management is highly centralized in many LDCs and their governments restrict the operation of community-run and private schools. Overly stringent controls discourage community-run and private schools from contributing to educational development. Easing these controls mobilizes additional private and local resources for education without excessively increasing the governments' fiscal burden.

While goals are proving elusive and resources are becoming scarcer, most governments of the LDCs also experience demands arising from rapid population growth, the drive for universal primary education, a general desire for more education and higher qualifications, and a continuous concern for improved quality. One way of alleviating the crisis is by spreading the burden of educational financing. Greater participation by non-governmental agencies, communities, families and individuals is needed. Examples of these forms of participation include support provided by religious bodies, such as Christian and Islamic missions, village development associations, employers, labour unions, co-operatives and voluntary organizations. Historically, all these institutions have been able to fill some important gaps that are beyond the reach of public services. Tapping the potential of those institutions already continuing educative tasks offers not only a new way of generating additional resources but also the means of spreading the benefits more widely.

Parents and communities can often ensure the success of an educational institution. The scale of community financing of education varies considerably between and within countries. Over the years, parents have accepted greater financial responsibility for sharing direct costs of

consumables, such as school uniforms, exercise books, learning materials and examination fees, and contributions towards the repair and maintenance of equipment through school funds. Building schools through self-help schemes is popular in some LDCs. For example in Nepal, 60 per cent of the labour for school construction is said to be provided free of charge by communities. 23/

In some developing countries, communities have created formal development associations in order to mobilize resources and bridge the gap between what they would like to be done and what the government is able to do. For example in Tanzania, the Kanyigo Development Association (KADEA) has established a flourishing secondary school. The people of Kanyigo subscribed Tshs 600,000 to establish the school and agreed to contribute Tshs 1,000,000 a year from coffee sales to help meet recurrent expenditure. 24/ Furthermore, the overwhelming part of the total costs for education which is about 93 per cent is provided by the Tanzanian people. 25/

The wide participation of a community in designing and operating its activities is essential to the success of educational institutions. Local control and leadership may provide the flexibility needed for proper integration and timing of educational activities with health, nutrition and other sectoral programmes. The community, with its knowledge of locality, can use existing resources more imaginatively and provide invaluable advice when it is necessary to modify plans in response to changing conditions. However, although community resources can provide a valuable supplement to government ones, research has also shown that community endeavours are often badly organized, lead to poor quality schools, and sometimes deflect official attempts to reduce geographic and social inequalities without some government guidance. To increase the effectiveness of community inputs, it is considered necessary to assist communities with technical advice and material.

H. Conclusions

Governments of LDCs as well as other developing countries have kept education high in their agendas because of its perceived contribution to a variety of national goals, including national integration, promotion of ideological commitment, lower fertility rates, achievement of equality of social and economic opportunity and realization of individual basic rights. However, educational crisis has escalated over the last decade and is likely to persist through the 1990s. School systems and higher institutions in the LDCs are exceedingly inefficient to meet the different needs of the people who have to cope with the changing world.

There is a very little chance that universal education will be achieved in many LDCs by the year 2000 and the average repetition rates at the primary level are high. Primary education in the LDCs, in general, shows a slower enrolment growth rate than higher levels of education. In times of crisis, primary education may suffer most in the competition for scarce resources, for this sector has comparatively less political power than secondary and higher institutions.

Shortages and low quality of instructional materials in the LDSs are exacerbated by the fewer qualified teachers and the continuing inability of these countries to offer better salaries and more professional status to teachers, thus ensuring their continued low morale. For example, more than 50 per cent of the primary teachers in Chad, Gambia and Sierra Leone, and 46 per cent of primary and secondary teachers in Bangladesh are unqualified.26/ Problems with instructional materials in the LDSs are excerbated by limited development, production and distribution resources.

The major problems in education in the LDCs in the coming years will be how to improve its internal efficiency, i.e. how to ensure more educational output per unit of input. The major concern evolves around the need of simultaneously reducing costs, improving quality and increasing educational opportunities. In some of the LDCs additional resources will be necessary just to keep school enrolments abreast of population growth. However, increased efforts can be made to encourage community participation and the utilization of local resources involving all sectors of society, including local leaders, industries, religious and social organization to share educational costs and make education more self-relient financially. In higher and vocational institutions, expanded attention can be given to user fees and loans and a variety of programmes of private involvement. In addition, private and employer-related education may be more widely encouraged in order to meet specialized knowledge needs.

Creating or improving national, standardized examination to offer uniform high standards for curriculum and teaching increases efficiency, equity, and relevance while encouraging teachers to improve the quality of education. Furthermore, the strengthening of the school systems and higher institutions requires efficient policy, planning and administrative infrastructures at the central and, as appropriate, at the regional and local levels.

Policy makers, planners and administrators alike of the LDCs should reflect upon the experience gained from other developing countries in comparable situations which will be useful in their own educational development.

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Table 1. Gross enrolment ratios in the least developed countries
(Percentages)

Countries	Adult literacy rate (%)		Primary			Secondary			Tertiary		
	1970	1985	1970	1980	1986	1970	1980	1986	1970	1980	1986
Afghanistan	7.6	23.7	24.4	34	18	5	10	6	0.7	1.4 a/	1.4
Bangladesh	24.5	33.1	56.0	62	60	16	18	18	2.2	3.0	4.9
Benin	15.3	25.9	34.9	64	65 d/	5	16	16	0.1	1.6	2.1 b/
Bhutan	..	..	5.8	15	23	0.6	4 b/	4	..	0.3	0.2 c/
Bostswana	42.0	70.8	62.4	91	105	7	19	31	0.7	1.1	2
Burkina Faso	7.9	13.2	13.7	21	35	1.5	3	6	0.1	0.3	0.7 c/
Burma				91	102 b/		22	24 b/			
Burundi	8.9	33.8	34.7	29	59	1.7	3	4	0.2	0.6	0.7 d/
Cape Verde	30.8	47.4	93.0	112	108	11	8	14	..	..	..
Central Afr. Rep	15.4	40.2	63.8	71	66	4	14	13	0.1	0.9	1.2 d/
Chad	10.6	25.3	34.6		43	2		6	0.1		0.4 c/
Comoros	..	..	93.0	93	80	3	24	30	..	..	..
Democratic Yemen	19.9	41.4	61.4	65	66 b/	4	18	19 b/	0.1	2.3	..
Ethiopia	6.3	55.2 b/	16.4	35	36 d/	4	9	12 d/	0.2	0.5	0.7 d/
Equatorial Guinea	..	..	..	84	108 b/	..	..	10 a/	..	..	..
Gambia	10.7	25.1	25.8	52	75 d/	9	13	20 d/	..	..	
Guinea	14.3	28.3	32.9	31	29	13	14	9	0.6	3.9	1.3
Guinea Bissau	9.6	31.4	38.2	67	60 c/	8	6	11 c/	..	..	..
Haiti	21.2	37.6	49.6	67	78 c/	5	12	18 c/	..	0.9	1.1 c/
Lao	32.4	8.4	62.8	94	94 d/	4	18	19 d/	0.1	0.5	1.5 d/
Lesotho	62.2	73.6	97.6	102	115 d/	6.5	17	22 c/	0.4	1.6	1.8 c/
Malawi	29.1	41.2	37.3	61	64 d/	3	4	4 d/	0.3	0.7	0.7
Mali	7.2	26.8	22.4	25	22 d/	5	8	7 d/	0.2	0.3	1.0
Mauritania	..	..	14	34	46	..	10	15	..	..	0.4
Nepal	12.6	25.6	26.2	83	79 d/	10	21	25 d/	1.7	3.2	4.6 c/
Niger	3.8	13.9	14.2	27	29	1	5	6 d/	0.1	0.3	0.6 c/
Rwanda	31.8	46.6	53.1	63	67	2.5	2	3	0.2	0.3	0.4 d/
Sierra Leone	..	..	33.6	54	58 a/	8	14	17 a/	0.5	0.6	..
Somalia	3.2	11.6	11.7	34	20 d/	3	13	12 d/	0.4	..	3.9
Sudan	17.0	..	37.9	50	50 d/	7	16	20 d/	1.1	1.8	2.0 d/
Togo	..	41.7	70.9	122	102	7	34	21	0.5	2.2	1.8 c/
Uganda	41.1	57.3	58.1	50	58 a/	6	5	8 a/	0.5	0.5	0.8 d/
U. Rep of Tanzania	32.4	..	34.0	93	69	3	3	3	0.2	0.3 b/	0.3
Yemen	4.6	13.7	12.4	46	79 d/	1	5	15 d/	..	1.2	..
Average	19.35	34.34									

Source: UNESCO Yearbook 1985 and 1988; UNESCO, The current literacy situation in the world. (Paris, 1987).

Footnotes: a/1982
b/1983
c/1984
d/1985

Table 2. Illiteracy rates among population aged 15 and over by sex, 1985
(Percentages)

Region	Both sexes	Males	Females	Female-male differential
World	27.7	20.5	34.9	14.4
Developed countries	2.1	1.7	2.6	0.9
Developing countries	38.2	27.9	48.9	21.0
of which: LDCs	67.6	56.9	78.4	21.5

Source: UNESCO, Office of Statistics, Compendium of Statistics on Illiteracy, No. 30. (Paris, 1988), p. 9.

Table 3. Indicators of Educational effort and result in some least developed countries

Countries	Student-teacher-ratios-primary schools		Average % of grade 1 completing primary school
	1980	1985	1980 - 1986
Afghanistan	32	37	54
Bangladesh	54	47	20
Benin	48	33	15
Bhutan	25	-	25
Burkina Faso	54	58	75
Myanmar	52	-	27
Burundi	37	56	-
Central Afr. Rep	60	66	53
Chad	-	71	29
Democratic Yemen	27	-	40
Ethiopia	64	48	41
Haiti	44	-	45
Lao	30	25	14
Lesotho	48	-	27
Malawi	65	61	28
Mali	42	34	25
Mauritania	41	51	80
Nepal	38	35	27
Niger	41	37	67
Rwanda	59	56	47
Sierra Leone	33	-	48
Somalia	33	20	33
Sudan	34	35	61
Togo	55	46	43
Uganda	34	-	58
U. Rep of Tanzania	41	34	76

Source: Office of Statistics UNESCO.

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Chapter II

Medical services institutions

The estimated 375 million population of the LDCs are often characterized as trapped in a vicious cycle of poverty and malnutrition. They also have to contend with poor or non-existent sanitary facilities and endemic diseases.

Improving access to essential health care services for the poor is now the major policy issue. The concept of primary health care (PHC) has been advanced as the most promising solution to the needs of developing countries. Targeted primarily on rural areas and urban poor, PHC offers the possibility of expanded access to cost-effective intervention, even in the poorest countries.

The least developed countries are facing manifold problems in implementing PHC programmes. The main constraints are limited resources, insufficient and poorly-trained manpower and inadequate institutions. In most of the LDCs, such institutions as hospitals are very weak. Because of changing concepts and new trends in the health care system, the functions of hospitals do not meet the major needs of the large majority of the population.

However, there is a growing awareness of the need for change in the health care system. Some innovative approaches to reaching underserved population groups, integrating hospital services into national health systems, and strengthening community-based health services are being taken.

This chapter focuses on the experience of some LDCs that have been trying to overcome impediments to hospital development in order to respond to changing circumstances and needs. It examines the approaches being taken in providing support to PHC activities, in orienting and training health personnel

towards PHC, and in promoting community involvement and intersectoral co-ordination.

1. The development of hospitals

The degree of ill health in the LDCs remains enormous. Life expectancy at birth is 47.9 years. In contrast this figure for other developing countries is 61.5 years and 72.4 years for developed countries. Infant mortality rates are 32 per cent higher than in developing countries and the maternal mortality rates 20 per cent higher. 1/

The health strategy adopted by many developing countries, including the LDCs, has been modelled on that of western countries. The professional and institutional approach has failed to provide effective basic care for the majority.

The hospitals have developed as institutions isolated from the lives and the comprehension of the majority of the population. Their development has not come about as a direct response to the major health needs and demands of the people and the possibility of positively acting upon these needs and demands.

What are the major factors that lie behind the development of hospitals in the way described? One reason is that the poor have only a restricted ability to fulfill their demands for needed health care. They are not in a position, economically or politically, to enjoy access to much health care and not at all to that which is based upon a costly sophisticated technology. Health care planning is based upon the assumption that the whole population is to be covered with particular services and that this coverage must be based upon sophisticated technologies.

These assumptions ignore the inability of the poor to purchase high cost care and that governments cannot make available to them sufficient resources. Another reason has been the external factor brought to bear upon the hospital - external to mass health needs and demands. The major factor has been the technology itself. 2/ The tendency has been to build sophisticated hospitals in the image of those in the western countries, staffed by qualified personnel.

The outcome has thus been quite different. The hospitals, which were largely concentrated in the towns and cities, were predominantly curative in nature and accessible only to a small and privileged section of the population, while claiming a big share of the health budget. With the increase in sophistication and specialization of the hospitals, the gap between the actual needs and the services provided has widened.

Hospitals, especially teaching institutions, face inwards rather than outwards. Consequently, they offer only limited support to other less sophisticated health care institutions and no direct support to communities and families. The training activities of hospitals engaged in teaching are based upon the "technological imperative" and produces graduates having the inclination and capacity to practice medicine mainly in a hospital setting.

The continued isolation of hospitals has contributed to the present shortcomings in the health system. The problems of allocation, internal inefficiiency and equity are the main problems facing the LDCs.

Typically, urban health centres are overcrowded, while rural facilities have few patients. In Somalia, for example, hospitals in major cities have occupancy rates of over 80 per cent, while secondary hospitals in the smallest

towns have rates of 40 per cent or less. In Rwanda, 70 percent of the beds in city hospitals are occupied, but only 30 per cent in rural health centres. 3/

Consumers crowd themselves into modern urban institutions for obvious reasons. Personnel have more training, equipment and laboratories are more complete, a wider range of diseases and emergencies can be handled, and the institutions are located in cities where required drugs and related services are available.

Cost-effective programmes, such as immunization, control of communicable diseases, health education, family planning and maternal care, simple curative care and referrals, receive little attention. Furthermore, urban hospitals provide more costly yet less effective curative services. In Bangladesh, for example, the government subsidizes specialized orthopedic, cardiovascular and eye care institutions catering to a relatively small number of persons, while an estimated 324,000 active tuberculosis patients above the age of ten receive no treatment, at least 90,000 children under the age of five die of pneumonia, and 136,000 infants die of tetanus. 4/

Inequitable urban-rural distribution of benefits is common in the LDCs. A large proportion of the population lives in the countryside, but 70 per cent or more of government health spending goes to hospital-based care in cities.

In Niger, about half of the government health budget goes to hospital services in urban areas. Another 40 per cent is spent on provincial facilities in the main towns, and just 10 per cent is spent in rural areas, where over 80 per cent of the population lives. 5/

Medical personnel mostly practise in major urban areas where 10 to 20 per cent of the population lives. Many health workers are trained in sophisticated and institutional patient care. In most cases, they lack the

ability to communicate with rural people and have little interest in the health issues of the communities.

The world community recognized that the alternative approach of primary health care involving all potential resources and based on equity and justice, individual and community self-reliance and intersectoral co-operation, including community involvement, would promote and achieve faster and more efficiently the goals of health for all. In 1978 the Alma-Ata Conference endorsed primary health care as the key to achieving health for all by the year 2000. The PHC concept emphasizes the need for health promotion and the universal provision of basic health services rather than costly, high-tech specialist facilities in urban areas, as has been the typical pattern in most countries. The Conference called upon all governments to formulate national policies, strategies and plans of action to launch and sustain primary health care within their countries and to adopt PHC to their own local social, culture and economic conditions. 6/

In the Primary Health Care (PHC) approach, the hospitals are seen as a tremendous potential resource to support PHC. Acceptance of the PHC approach implies not only full integration of hospitals with the overall health system, but the re-organization of the entire health system so as to provide support for PHC activities.

It emphasizes that coverage should be universal and that care be provided according to community needs. It means a re-allocation of resources from better-off urban areas to rural areas, and from curative to preventive care. It requires re-orientation and re-training towards PHC of health personnel. The shift in perception provides an impetus to re-orient the position of hospitals in support of new trends in health care. The new approach brings

about the changes both in the internal functioning of hospitals and in their relationship with the community in order to make them an integral part of the entire health system.

Attitudes are now changing and hospitals are increasingly concerned with the adaption of their functions to satisfy both individual and community needs. The core functions of hospitals may be identified as follows: direct support for PHC through a system of referrals, promoting community involvement and training and a re-orientation of health personnel towards PHC.

2. Support for primary health care

a) Referral systems

In supporting PHC, front-line hospitals, usually at district levels, act as a focal point for referrals. Patients are referred to hospitals by the appropriate primary health worker and referred back to that level when their state of health permits. It should be able to provide essential medical care.

Another responsibility is to support communities and health workers who provide PHC with respect to all problems that they encounter. They should provide guidance and advice, technical backing and supervision, continuing education and monitoring of health problems.

Another facet of support is to provide managerial support to the planning and organization of the health system in the district, and to the organization of PHC by communities.

Front-line hospitals are also concerned with logistics, which includes supply of drugs, transportation, communication.

In performing these functions, hospitals face many difficulties. Key problems identified in patient referrals are overloading of hospitals with

inappropriate referrals by inexperienced health workers, barriers of distance, transport or payment. Other problems include inappropriate hospital use because of lack of support and facilities in the community, lack of trust between hospital and community-oriented services, because of the absence of organizational or personal links, lack of logistics support, and inadequate training at each level. 7/

For example, surveys made in Tanzania showed that rural health clinics personnel referred only 3 per cent of their patients to a higher level, when in fact they were not capable of treating 36 per cent of the cases themselves. The non-referrals were given drugs which would not do anything to help improve their health.

In the developing countires, including the LDCs, the referral system for health care is very weak. While they are recognizing the need for increased hospital support, particularly at the first referral level, hospitals are not integrated with other local health services.

There are health systems that are making steps to create a more comprehensive health care system for the community within which the role of hospitals is linked with other aspects of health care. In other situations, individual hospitals are attempting to reshape their activities to meet wider needs of the community. Examples of hospitals trying to provide support to PHC can be found in some countries.

For example, in Nepal, national planning aims to produce a referral system that will link local communities to the central hospitals via four intermediate levels - health posts, district, zonal and regional hospitals.

The Patan Hospital in Patan provides a large volume of PHC activities, as well as supports such work outside its walls. When the hospital was opened in

1982, it inherited many influences from the mission hospital it superceded. However, it was intended that the new hospital should be run independently by a board in which the government, mission and local community would be represented equally. The hospital was designed and built to meet four prime objectives - to provide primary health care through the outpatient department; to provide secondary medical care through the departments of medicine, surgery, pediatrics and gynecology; to support the PHC programme in the district community; and to help with national training programmes for health workers.

The result is that PHC activities form a large part of the hospital services. Intrinsic to the design of the outpatient department is the concept of a "health post within a hospital", manned by paramedical staff (health assistants and auxiliary nurse-midwives) and supervised by a family practitioner doctor, where the majority of self-referred patients are treated.

The hospital also provides offices, meeting rooms and educational facilities for the community PHC services, and its doctors visit health posts in the district to support the local health workers. The policy of the hospital is to provide care only at the primary and secondary levels and to avoid developing specialized services. In pursuing this innovative approach, although far from perfect, it succeeded well enough in practice.

The main support from the hospital comes via the referral system. It involves the use of a return referral slip, sent with the patient from the health post and returned there by mail from the hospital when the consultation and treatment were completed and the patient returned to the care of the health post staff. The slip includes a portion for completion which allows patients to reclaim reimbursable costs and a carbon copy of the referral,

which is then sent to the senior public health nurse of the hospital. This provides the means of monitoring all referrals.

District patients so referred receive preferential treatment in the hospital with no registration fee chargeable, separate registration arrangements available and the opportunity of more direct access to the doctor. Similar concessions are available to patients referred from other sources.

The hospital provides and monitors such PHC services as immunization and family planning. The training of health staff is given high priority and health workers of various grades attend courses and seminars. A strong referral system is the most importatnt means by which the Patan Hospital supports PHC activities in the district. 9/

Hospitals in many countries, either by design or by force of circumstances, are transferring clinical activities to outreach programmes, and home and community care services. Another example of an unusual innovation which demonstrates how the traditional ideas on hospital and health are changing can be observed in Bangladesh. In the Gonoshasthaya Kendra or People's Health Centre Trust, small hospitals are integrated into a primary health care and rural community development programmes are designed to improve the health of the poor people of Bangladesh. This programme is largely a non-hospital one and consists of agricultural extension groups, the promotion of education, training and employment of women, and the co-operative commercial production of essential drugs. 10/

b) Community involvement

An important area of hospital participation in PHC is the promotion of community involvement and intersectoral co-operation. It provides hospitals

with an opportunity to perform not only as a medical centre but also as a political and social institution.

Hospitals have lagged behind other sectors of the health service in terms of community involvement. They have been curative-oriented and have concentrated on individuals rather than communities. People have not been encouraged to participate in decision-making and have become used to solutions being imposed by professional experts. The other reason is that not enough effort has been made to promote community participation by structuring health service.

Community involvement in health matters has found acceptance in the LDCs. There they face several problems. The main obstacles to community involvement are the lack of a clear idea of what the communities are expected to do, centralization in the control of resources and decision-making. A poorly-educated population is found to have a passive attitude which has been nourished by long dependence on the government for most of the action and resources.

Where community participation has progressed, it has been done through the formation of necessary mechanisms and, in some cases, through the local reinforcement of traditional values.

The creation of village, local or district health committees or councils, comprising the representatives of the local community, has proved to be an effective appraoch, which provides communities with a bigger say in health matters.

A people-centred approach to PHC can be seen from the example of the Mvumi hospital community-based health care programme in Tanzania. Mvumi hospital activities outside its walls started in the early 1960s. The

nutrition rehabilitation unit (NURU) was built in 1967. In 1974, the Community Health Department was started in order to run NURU, to train village health workers and conduct mobile clinics in the villages.

However, the work slowed down due to fuel shortages, vehicle breakdowns and cholera outbreaks. Disruptions of scheduled clinics led to low contact and effectiveness coverages. Trained health workers received little support. The underlying causes of failure were related to the vast area covered, the poor interface between the programme and the community, the fact that the local health staff was not involved and that communications and training skills were lacking.

In 1981, the Community Health Department at the Mvumi hospital tried a new community approach in order to involve the communities in the promotion process of their health. Much was done to correct the previous obstacles. Work started in nine selected villages. Programme team members visited other health programmes and participated in the training of trainers' workshops to learn about the importance of involving the community in defining its own goals and actions. Listening and learning from the community was of crucial importance. 11/

Discussions took place twice monthly in each village. They involved village leaders, group representatives and public meetings. Awareness seminars were organized for the leaders of the villages, extension workers and head teachers. The Mvumi health team also conducted monthly mobile mother and child care clinics which were assisted by health workers. It led to a high level of acceptability and contact coverage.

The interaction between the health team and the selected villages obviated the formation of a health development committee consisting of village

chairmen and local religious leaders. The Committee articulated village health promoters training in order to follow-up and supervise the village health activities at the grassroots. Popularly selected volunteers received a four-week training with emphasis on village organization, immunization, water and sanitation, and nutrition. Village health workers and traditional birth attendants were also trained by the national PHC programme.

Although there were some problems, the community support was decisive in the Mvumi hospital health care programme.

The experience of the Ayadan Township in Burma is another example of active community involvement. Ayadan is situated in the dry zone of Burma. One of the first efforts of the government to improve PHC took place in 1960 when the Ministry of Agriculture and Forests dug ten wells. However, the handpumps yielded only about one litre of water per minute and families had to spend most of each day in collecting water.

In 1975, the health care delivery system was restructured so as to concentrate on priority health problems of the rural population. The Ayadan Township People's Health Plan (PHP) began in 1978 with the formation of the PHP Committee. The Committee was given the responsibility for planning the Township's health programme, supervising its implementation, co-ordinating activities with relevant sectors, promoting community participation, and evaluating progress.

Impressive progress in health development has been reported since the PHP began its activities. Every village now has its own volunteer health worker. The village people's council is responsible for supervising volunteer health worker. A pilot scheme has begun to train "ten-household health workers" whose role is to gather information for health staff and to educate the ten

households in their care. To date, 2,500 of them have been trained and placed in the community. The traditional birth attendants have also been trained.

Safe water supply has received the highest priority. Almost all villages have access to safe water. There have been no outbreaks of cholera while incidents of diarrhoea have fallen dramatically. There have been more immunizations, more women have access to prenatal services, and deliveries of babies attended by trained personnel have increased from 40 to 98 per cent. Community participation in improving food supplies and nutrition has increased.

Co-operative health clinics are financed by village co-operative societies. Funds are raised by communities through donations, voluntary contributions and social welfare funds. 12/ For its innovative work, the Township was awarded a share of the 1985 Sasa Kawa Health Prize, offered by the Japanese Foundation.

In Malawi, the area and village health committees are the main vehicles for developing PHC. The Committees select, reward and supervise volunteer health workers. They are mainly concerned with specific development projects, for generating community resources, mobilizing labour resources and materials, etc. They also act as a channel of communication on developmental matters. 13/

The functions of the health committees are to report on infectious diseases, organize people for health campaigns, and identify health problems in the village. The process of identifying health problems is initiated through contacts by the PHC area teams who get support from the district PHC teams, regional and national PHC committees. The activities to deal with these problems are implemented through discussion between communities and the local PHC team members. They are also responsible for the provision and maintenance of safe water supplies, promotion of use of health facilities especially for mother and child health (MCH) care, immunization.

The effectiveness of community involvement is directly related to progress in decentralization and intersectoral co-ordination. Steps are being taken in some countries to decentralize administrative responsibilty for health care to the provincial and district levels with a view to providing effective support to the community level. The African Health Development scenario was adopted in 1985 by African Health Ministers meeting in Lusaka in 1985. A three-year (1986-1989) scenario includes definition or redefinition of political administrative units which can ensure administrative responsibility for health at the local level, establishment of district development committees, and annual allocation of budget to all districts to enable each to implement decentralized multisectoral development activities. All countries of the region, including the LDCs, started to follow this approach.

Some countries, such as Bangladesh and Burma, are giving increased attention to the formulation of health policies. In Bangladesh, the decentralization of administration and the transfer of political and financial powers are expected to give greater impetus for self-planning and implementation, and to encourage communities to move towards self-management.

In order to promote community understanding of health problems, most countries are expanding health education through the use of media, primary school teachers, health personnel, village organization, and national education campaigns. In some LDCs, efforts to increase public understanding have included the introduction of educational models for health in schools in general (in Burkina Faso), and the organization of discussions by village health committees (in Burundi).

There is also a growing awareness and wider acceptance by the LDCs of the potential of non-governmental and voluntary private organizations in health care issues.

c) Intersectoral co-ordination

The integration of PHC, hospitals and all other services and agencies that comprise a comprehensive health system at the national or local level is a new element in promoting community health development. The PHC approach is an integrated package; its measures reinforce and nurture each other and, in isolation, each may have little effect.

The central tenet is that improvements in health development are produced by such factors as nutrition, clean water and sanitation, control of diseases, and mass immunization. It implies co-ordinated action and contributions from other sectors.

In most of the LDCs, health programmes are an integral part of the economic and social development plans. Such sectors as water supply, sanitation, and food crops appear to be receiving particular attention. However, serious constraints need to be overcome in implementing intersectoral programmes. The common obstacles in developing countries, as well as in the LDCs, include institutional and bureaucratic impediments and deficiencies in regard to human and financial resources.

Institutional or bureaucratic obstacles include the absence of mechanisms with formal responsibility for intersectoral action. Where they exist, they are not always properly defined. Rivalries between different institutions and self-protective behaviour of bureaucracies also need to be overcome. Centralized bureaucracy frequently prevents plans from going into effect because of a shortage of funds and personnel. 14/

In many LDCs, a mixture of government, private and non-governmental organizations comprise the health service. Under such circumstances, without effective co-ordination among the various organizations, the possibilities for a unified and co-ordinated action to support PHC are likely to be limited.

The need for an intersectoral approach in response to new health problems is emphasized by all LDCs. They have begun to restructure and reorganize the Ministries of Health and to establish mechanisms for intersectoral action to achieve specific health goals. National co-ordinating committees and councils and health development committees have been established to address intersectoral policy objectives. Networks at the local, district and regional levels were also set up. In the villages, multidisciplinary teams are attempting to meet the needs of the community in an integrated manner.

Emphasis is being placed on integrating immunization, diarrhoeal disease control, and nutrition at the community level. Integration of preventive and curative services at the regional and district levels is being pursued. The NGO and the private sector are also joining hands in support of intersectoral co-operation. These issues are discussed later in this section.

In Malawi, co-ordination is being attempted at the central level through the creation of a single entity for primary health care. The National PHC Committee has been established, which includes representatives from all sectors and NGOs, to foster collaboration in health work and recommend action to be taken by the government to implement PHC programmes. A PHC co-ordinator has been appointed, who is responsible for the day-to-day running of PHC support activities at Headquarters and for providing districts with necessary technical and administration support.

The National PHC core group has been established to ensure the co-operation and participation of various units in the Ministry of Health. This group is responsible for developing, monitoring and evaluating the implementation of those activities required for PHC at the national level.

At the sub-national level, in the district and in the village, there are mechanisms to strengthen intersectoral action for health. The process of developing the network has facilitated acceptance of the idea that a co-ordinating network of collaborating units is needed. This network is a basic element in the national "health for all" plan and has promoted interest among political decision-makers.

In Ethiopia, high-level political appointments have been made to a special National Health Development Network Committee in which relevant interested groups are represented. It has a strong co-ordinating role for the 14 institutions which comprise the network. The Department of Community Health of the Medical Faculty of Addis Ababa University acts as the network's secretariat. The network has undertaken several activities, such as reviewing, through established working groups, curricula for various health professionals, the preparation of a national programme of continuing education, and the provision of learning materials for various types of health workers. Several field projects have been initiated. 15/

As it was discussed above, an important condition of linkages and intersectoral co-ordination is a high level of community participation and decentralization. It is within the community that collaboration extends across sectoral boundaries.

3. Orientation and training of health personnel towards PHC

In the LDCs, health personnel are seldom appropriately trained for the tasks they are expected to perform. The reason is that traditional medical education is curative oriented and does not train professionals according to the concepts and needs of PHC. Lack of understanding of PHC is also coupled with insufficient concern for social equity.

In the LDCs, there is 1 health worker per 2,400 people, compared with 1 per 100 people in the industrialized countries. 16/ The unsatisfactory deployment of these workers is such that a majority of them are working in and around urban areas.

The improvement of hospitals towards PHC can be achieved through a re-orientation of health personnel and improving medical education. Efforts are being made in the LDCs to increase the knowledge and motivation of health workers in preventive and promotive aspects of health. Emphasis is given to community-based in-service training and to building a teaching approach.

The relevance of education to community needs is receiving attention. Some changes are occuring in educational objectives, medical school curriculum content and methods of learning. Many LDCs have been intensifying their efforts to develop new categories of health workers to complement those in the established health system as a way of extending health care to the whole population, especially those in the rural areas. They have recognized the changing roles of the nurse, intermediate health worker, and have began training programmes to prepare them, as well as tradtional birth attendants, for expanded roles at the community level.

In Bangladesh, action is being taken to correct an earlier tendency to train health personnel to cater to the needs of the urban elite. Training curricula are being re-oriented to give high priority to community medicine and students who are motivated to practise community medicine are being selected. Arrangements are being made for periodic field training with members of health teams working jointly with the community. 17/

In the Sudan, the rural hospital and the rural medical officer, with a team of health personnel, traditionally comprised an underdeveloped resource for programme management and implementation. The training of doctors had concentrated on hospital care and very little attention has been paid to primary care, preventive medicine and programme management.

The Sudanese Ministry of Health has designed a new training programme on PHC and rural hospital management for doctors designed to rural hospitals. The greater part of the country is served by these hospitals, which are within reach of most of the remote primary care units. Previously, hospital staff provided curative services under the direction of a relatively new medical graduate. Training objectives were established after the role of the rural medical officers was expanded to include leadership, administration, planning, supervision, and training in accordance with the needs of PHC programmes in the areas served by the hospitals.

The training programme was designed to deal with PHC priority measures, such as immunization, monitoring of nutrition, antenatal care, referral of high-risk pregnancies and the planning, implementation and evaluation functions of management, using community participation. A variety of assessment methods were introduced during the course and the participants visited the fields three to five months after completing their training programme.

Post-training field assessments were: to provide guidance and support to medical officers implementing PHC programmes; to identify difficulties and constraints confronting personnel responsible for the programmes; to consult with regional and provincial Ministries of Health officials on future courses; and to offer support for the medical officers in the rural hospitals. The follow-up visits, involving conversational interviews and more structured data collection, have helped significantly in efforts to improve the design of the training programme. Field visits were also a step towards strengthening the linkages between rural hospitals and the Ministry of Health. 18/.

One of the most serious difficulties to development of PHC in Ethiopia has been the absence of a decision-making mechanism at Awraja (district) level. Although there is universal agreement on the need to set up Awraja health management, opinions vary on who should be trained and who should train them. Disenchanted by the existing situation of the training institutions, the Ministry of Health started a new training programme for district health managers at its own Training and Demonstration Centre. This training scheme is based on the "learning-by-doing" approach, with practical experience in rural and urban areas. The trainers are assigned to one of the future districts.

They are thus encouraged to develop problem-solving approaches through community participation and intersectoral collaboration. They familiarize with the organization of district health services, the strategies used, and the type of activities with government and community organizations in delivering health services. Trainers conduct a survey designed to help them develop the right methods and skills for analysing the prevailing health situation and drawing up an action plan.

The Awraja health team is composed of programme co-ordinators, heads of hospitals and health centres and prominent non-governmental leaders. The team decides on all managerial aspects of the Awraja health services. Because of the government plan to establish an increasing number of Awrajas, the need for trained Awraja health managers has become urgent. Therefore, accelerated courses were started to assist district health managers to improve the planning, organization and carrying out of PHC programmes and to develop the skills, leadership and attitudes necessary for working with the community and other sectors. After the course, managers return to their districts for a period of two to six months during which they draw up a health profile and plan of action for health activities. Back in the training institution, they present these and discuss them during a workshop.

The Ethiopian training experience has entailed an unprecedented involvement of the Ministry of Health in the operation of teaching institutions. It has been very important in creating the orientation towards being a district health manager. In the absence of well-trained staff for teaching institutions, the use of various experts from the Ministry of Health has proved to be a very useful and effective way of using the available local resources. 19/

In Botswana, the National Health Institute, affiliated with the University, trains staff for the health services. Manpower development is not, however, confined to the National Health Institute. Other divisions, such as the Family Health Division and the Primary Health Care Department, also train staff under the supervision of the National Health Institute.

Health workers tend to bombard communities with occasionally conflicting information on different aspects of the same problem at different times. To

reduce the tendency to compartmentalize, an attempt was made to introduce an intersectoral approach to health development and to train certain groups to participate more fully and effectively in the promotion of health. To this end, the Family Health Division introduced training programmes for diffrent groups of students.

One such group is composed of students being trained in community development and social welfare. During their training, they learn about community diagnosis, data analysis, problem identification, and how to help the community in devising ways to solve its problems. They also learn about the planning, implementation and evaluation of health activities. Their learning activities include participation in meetings, seminars to discuss problems identified in consultation with community leaders, and contacting people to deal with the community's health problems.

Another example of the intersectoral approach is in the training of school teachers. To ensure that health topics are taught in elementary and secondary schools, teachers are trained how to integrate them into all subjects of syllabus. 20/ It is particularly important in the LDCs, where health personnel and resources are scarce, as one way to enhance health development.

In a district in eastern Nepal, auxiliary health workers are trained to provide health care to rural communities. The training lasts for one academic year and community-based learning activities are carried out. With their teachers, they are assigned for eight weeks to health posts where they practise various skills. A multidisciplinary team of teachers and health workers are involved in the training programme. This has been very effective in utilizing their responsibiities in a community setting. Auxiliary

nurse-midwife students also spent much of their training period at health posts where they worked in teams with health workers.

Another approach is to place students from a specific health profession to working with teams of health workers rather than to form teams of different categories of students. In this way, the students also require the competence of working with a team.

The fact that educational objectives based on professional competency have been achieved is due, in great part, to the curriculum developed especially for auxiliary health workers and nurse-midwives which is conducive to a multiprofessional team approach. 21/ These types of programmes are essential for preparing health workers to provide health care in rural communities, within the constraints of limited resources and rural conditions. The experience of Nepal is an example of team approach.

Universities tend to be among the slowest institutions in introducing change. They often resist efforts to reshape their own institutional boundaries. The medical universities in the LDCs are trying to integrate with society so as to become the catalyst in bringing about PHC. They are increasingly seeking a more realistic approach to the training of health workers. The universities are taking more socially-oriented line in promoting health by participating actively in projects in the field through intersectoral co-operation and community involvement.

It is within the new context of community health that the University Centres for Health Sciences have been set up in Mali, Congo, Central African Republic, Mali, Niger and in other countries. These centres have cast aside the traditional concepts of faculties of medicine, oriented towards individual and curative medicine. Instead, they concentrate on preventive and community

medicine, health information and education, epidemiology, communicable diseases, social medicine, hygiene, etc.

Besides the general training programmes, these university centres stress problems of nutrition, maternal and child care, environmental health, water supplies, living conditions and health economics. Since the training offered is essentially intended for the largest and most underprivileged section of the population, the programme includes on-the-job training periods in the countryside. They have realized what their role must be and, through their research work, they are making a valid contribution to the efforts to attain the goal of health for all. 22/

Training institutions in Swaziland, particularly the Institute of Health Sciences, have made changes in the curricula to reflect the increased emphasis on PHC. The nursing curriculum now places emphasis on preventive and promotive community-oriented activities. The health inspector curriculum deals extensively with communication skills, health education and community participation. Workshops are conducted on PHC to orient workers who are already on the job. 23/

In some LDCs, emphasis is given to postgraduate training in public health. For example, postgraduate training is available in Benin at the Regional Centre for Health Development, Cotonu. Its courses give priority to health programmes management and PHC. Emphasis is placed on the training of different categories of health personnel and workers from other areas to work in teams in order to solve the health problems of the community. Curriculum includes PHC issues such as health education, environmental health, and communicable disease control. 24/

4. Traditional practitioners

In some LDCs, efforts are being made to integrate traditional and modern health services. This includes incorporation of traditional practitioners in PHC and training of health workers in the use of traditional medicines. In these countries, PHC devolves on the healer, herbalist, traditional midwife and other traditional practitioners. Generally speaking, traditional practitioners qualify as institutions. They operate in individual roles and are widely respected within the community. They are the community health workers in their society and enjoy the confidence of the people and understand the real needs of their community.

Traditional medicine therefore has a major role in primary health care. There are, however, certain major constraints regarding the use of traditional medicine in PHC. The incorporation of traditional health systems into the official health care system requires a major policy decision at a high government level.

The integration of a collection of fully-trained, half-trained and untrained practitioners into the health care system raises several problems. Traditional practitioners far outnumber modern health professionals. Over 90 per cent of them work in rural areas while the remaining 10 per cent cater to the disadvantaged population in urban areas. 25/

Those with fully integrated training pose no problems. They have practices in both systems and the well-established and experienced ones have consultant practices in big cities. The half-trained practitioners work in rural areas and some have been engaged in government clinics, for example, in Burma and Nepal. Integrated practices have also been introduced into some hospitals where traditional practitioners work alongside modern physicians and

employ traditional medicine, including herbal medicine. Those with no institutional training present several problems. The courses followed by this group offer no practical training essential for the acquisition of skills. Orientation courses and in-service training are also lacking.

The traditional midwives are an important category of primary health workers. In some countries, they are responsible for 90 per cent of the births. The training and integration of traditional midwives into health teams have been initiated in several countries. The situation regarding traditional healers, particularly those with no training or education, is less favourable. The major reason is that midwives are mainly concerned with childbirth and mother and child care, while healers perform a wide range of functions based on phenomena not readily understood by health professionals. Training programmes mostly focus on traditional birth attendants and few on healers.

Efforts are being made in several countries to establish closer collaboration between traditional and conventional systems to re-orient traditional healers and practitioners to meet the needs of PHC. In Nepal, in addition to the efforts of the government to provide a better health service, people obtain health care from traditional medical healers, private medical practitioners and other indigenous sources. In rural centres, health services are provided by so-called "compounders". These compounders are mostly made up of trained health workers who have retired from or have quit government service and have established private dispensaries. It was found that their services are very much appreciated by the community.

The reason for not preferring government-operated health centres was the absence or inaccessibility of the district medical officer, limited working

hours, long waiting times, unavailability of medicines and lack of familiarity with the medical personnel.

The compounders, in complicated cases, refer patients to district or regional hospitals or traditional local healers. There is a good co-ordination between traditional local healers and the private medical practitioners. Attention is given to integrating traditional local healers and ayurvedic services with government health services. The ayurvedic system of medicine, which is traditional medicine practised in southeastern Asia, is being developed as an integral part of the health service. 26/

In Bangladesh, the traditional system of medicine is being practiced by 5,000 registered practitioners, in addition to about 3,000 unregistered practitioners. Only five to forty practitioners are institutionally qualified. There are four institutions which impart training in traditional medicine. They offer a four-year diploma course with an enrolment of fifty students per year in each institute. In Burma, nearly 30,000 traditional medical practitioners provide medical care to about 85 per cent of the country's population. An indigenous medical institute and hospital run by the government, as well as 34 dispensaries, are devoted to indigenous medicine. 27/

In the LDCs, the training programmes for traditional birth attendants (TBA) have been developed to improve their efficiency and include family planning activities. In Malawi, nationwide TBA training programmes were introduced in 1982. The trained TBAs are being used as health promoters, as well as a source for health care, especially for pregnant women. Training programmes include major areas covering maternal health and health-related problems during pregnancy, child birth and post natal period, and referral of such problems to appropriate health facilities.

The Ministry of Health has trained a certain number of traditional birth attendants in all twenty four districts of Malawi. The MOH has also introduced courses on child spacing, malaria, diarrhoea management, etc. for TBAs. By the end of 1986, the programme had trained more than 8,000 TBAs. The MOH also introduced community health programmes for registered nurses in 1981, followed by similar programmes for enrolled nurses in 1986. One of the major responsibilities of community nurses is to organize home visits and work closely with other community-based workers, including TBAs, in organizing MCH programmes.

In Sierra Leone, 70 per cent of child deliveries are still carried out by traditional midwives who are highly respected and are usually leading members of the woman's societies. With a view to linking the traditional midwives, health and maternity centres, and the district hospital, a working group was set up in 1982 by the Sierra Leone National PHC Task Force. It is composed of, in addition to others, a senior obstetrician who is very knowledgeable in traditional midwifery practice, the heads of training programmes for midwives, some maternal and child health aides, some traditional midwives, and a community health nursing supervisor. This group carried out a study by reviewing all aspects of midwifery care in the country, both in urban and rural areas, and at all health service levels, training and appropriate use of resources. 28/

The integration of traditional and modern health services also includes a wider use of locally-produced herbal medicine. The high cost of drugs and the inability of many countries to purchase such drugs have prompted several countries to look for local products in the form of medical plants and herbal medicines. Some countries are exploring the possibility of developing tested

herbal medicines for use in primary health care centres. Primary health workers are beginning to have a basic knowledge concerning medicinal plants, their cultivation and preparation for therapeutic applications within the community in which they work.

5. Role of non-governmental organizations and the private sector

For many LDCs, health care provided by organizations outside the public sector is a major component of health care provision. Until recently, the role of the non-public sector in health care was not given due recognition by governments.

This situation is now changing with a more explicit recognition of the extent and importance of the non-public sector. PHC approach has, in varying degree, forced upon governments and others involved in health care a recognition of the need to appraise critically the workings of all health care providers through its stress on intersectoral co-ordination, appropriate health care and equity. Financial problems have forced a closer look at the means of expanding health care provision with minimal implications for government expenditure. This has led to greater interest in the private sector as one possible way of achieving PHC goals. 29/

Religious missions are particularly effective as informal local health organizations. Church-related health services are often multidimensional and involve hospital-based services with outreach clinics of either a mobile or permanent nature. Many church-related services have had extensive involvement in training staff.

An important provider of health services in Malawi is the Private Hospital Association of Malawi (PHAM), which is made up largely of church

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organizations. Of the country's forty four hospitals, excluding the two regional hospitals, twenty are run by the PHAM, representing 38 per cent of all hospital beds and 35 per cent of all in-patients. The PHAM units within a district fall under the supervision of the district team.

In Botswana, missions play an important role and, in recent years, health services have also been provided by mining companies. Mining companies operate three hospitals for their employees. The government co-ordinates well with the health services of the missions and mining sectors. 30/

There are a variety of local health care organizations operating within the social welfare field. They range from village development committees to women's clubs, which have responsibility for various health programmes.

Modern private care is dominated by independent physicians. Private physicians are joined by government physicians who maintain part-time practices, by private nurses, midwives and by various non-profit and voluntary organizations.

Private health care is less likely to be concerned with wider issues of community health or PHC. NGOs, on the other hand, have in many instances been at the forefront of innovative primary health care activities, particularly those with links into other sectors, such as broader community development.

In many countries, however, there are barriers restricting community organizations and private groups from initiating, expanding or improving health care service. In Benin, Chad and Togo, health services outside the state-administered health system are discouraged. In Malawi, restrictions on private practice led to the emigration of indigenous doctors. In some countries, traditional practitioners - instead of receiving the training and support that would enable them to collaborate better with the modern sector to promote primary health care - are dismissed as incompetent.

Some governments are removing this kind of restrictions and are encouraging community-run and private sector health services by providing subsidies and administrative support.

Co-operation between the public and non-governmental sectors in providing health care sometimes have been fostered by governments. It is common in countries where non-governmental organizations provide an important share of health care services and where the government sector is unable to expand rapidly enough to satisfy demand. In Rwanda, for example, the government reimburses missions, which provide 40 per cent of the country's health services, for 86 per cent of the salaries of Rwandese staff. These public subsidies account for 4 to 5 per cent of recurrent public health spending. 31/

Dialogue and inter-action between governments and NGOs as partners in health care are developing. In some LDCs, public health government departments have appointed focal points to keep in contact with NGOs, while NGO representatives participate in national and district health committees.

In Rwanda, the Board of Recognized Medical Institution of Rwanda (BUFMAR) performs a co-ordinating function for its 117 member medical institutions. It acts as spokesman for those members with the government public health authorities participating in national committees. BUFMAR also operates a pharmacy and drugstore, importing raw materials and then manufacturing and selling essential drugs. Health education materials are produced in its own workshop on such subjects as nutrition, clean water, pre-natal care for use by the health workers and others. Another department maintains and repairs medical equipment, from blood pressure instruments to x-ray units. 32/

In Lesotho, health authorities and NGOs came together to run workshops and train local village health workers. Recently, a "Directory of Health NGOs" has been compiled as another component of the joint undertaking.

These actions ensure co-ordination of efforts and help avoid duplication and achieve a more efficient use of scarce resources.

Conclusion

The primary health care approach is an important landmark along the way to a more equitable social order. PHC with its strong orientation to equity, community participation and low-cost technologies has been widely accepted by the LDCs. A positive start has been made by these countries in their quest for better health. Emphasis is being placed on increasing efficiency and effectiveness of the health sector, decentralization, expanding health care delivery infrastructure based on PHC. Among the changes seen are the attempts to improve hospital participation in PHC. Some illustrations of trends and practices that demonstrate how traditional ideas on appropriate hospital and health care are changing can be seen on the example of Patan hospital in Nepal. Innovative approaches to build partnerships with a view to developing self-reliance through community involvement is evolving. The experience of some LDCs, in particular the example of the Mvumu hospital in Tanzania, suggests that successful health care programmes are characterized by the extensive community participation and action. The practical approaches in training and reorientation of health personnel, their changing roles are noteworthy signs. It is evident that attempts are being made to promote intersectoral collaboration. Encouraging signs are the increased involvement of the non-governmental organizations and private sector, as well as the efforts to integrate traditional practitioners in PHC.

The above information pinpoints that many obstacles are still to be overcome before equitable health development can be achieved. Persistent problems of the past and emerging new problems are complex. New approaches and methods, new partnerships and resources are required to address effectively those problems. In fact, the rate of progress in the LDCs would serve as the real indicator of the validity of vision of health-for-all and the feasibility of attaining that goal.

Footnotes

1/ Trade and Development Report 1989, UNCTAD, p. 149.

2/ The role of hospitals in primary health care: report of a conference sponsored by the Aga Khan Foundation and the World Health Organization, 22-26 November 1981, Karachi, Pakistan. Geneva, Aga Khan Foundation/WHO, 1981.

3/ Finance and Development, IMF and World Bank publication, June 1987, p. 40.

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Chapter III

Development of financial institutions in the least developed countries

Economic development in any country both depends on and contributes to growth and diversification of the financial sector. Financial institutions and instruments are the means by which savings are mobilized for investments and are transferred from low-yielding to higher-yielding uses, and by which savers and investors diversify risk, can anticipate reliable returns or enhanced security or liquidity and are thus encouraged to make longer term commitments for purposes beyond their personal horizons. Also, they are the means by which fluctuations in the economy and in the resource needs of the public sector are smoothed out and shorter-term funding routinely supplied. In other words, these institutions and instruments are the key mechanisms for adjustment and lubrication of an increasingly large and complex economic system.

The least developed countries have evolved a variety of financial institutions to meet the special needs of different segments of financial markets. These may include commercial and saving banks, mortgage banks, merchant and investment banks, other thrift institutions (savings and loan associations, credit unions), development finance corporations, and so on. However, on the whole their national financial systems, with a few exceptions, remain rather underdeveloped. There is still a significant non-monetary sector in existence. Rural areas are mainly served by informal financial intermediaries, while formal ones tend to concentrate their operational activities in urban areas.

The obstacles to further expansion of the financial sector in the last developed countries are considered to be the mass poverty, the high rate of illiteracy of the population, the non-monitarization of the economy, the shortage of qualified personnel, and of course the lack of financial savings. In some cases, moreover, the resistance of traditional socio-economic structures to the introduction of new patterns of relations also constitutes a factor hindering the development of the formal financial sector.

Yet, the few existing financial intermediaries themselves have sometimes been criticized for a slow spreading of financial services in the least developed countries. Some studies suggest that they have failed to make use of existing opportunities, either, because their operations are too urban-biased or are inconsistent given socio-economic conditions of the least developed countries 1/. In other studies, however, it is insisted that the failure of formal financial institutions should be attributed to policy-makers, who have modified their country's financial institutions according to their own perceptions rather than to objective needs 2/. Whatever the reasons behind the failure of formal financial institutions to contribute to the process of development on the expected scale, it is important to clarify the relationship between the various factors that determine the performance of financial intermediaries with respect to the socio-economic conditions of the least developed countries. The recent revival of interest in institutional development has signaled the importance of this issue, especially as concerns the improving and restructuring of these institutions to make their presence more felt in rural areas and, thus, to widen domestic resource mobilization and ensure more resources being allocated to the most efficient users.

However, with regard to future patterns of institutional restructuring, there is little consensus among analysts. Available studies on institutional development in the least developed countries emphasize different aspects of this process. Some of them underline the crucial importance of the institutional design. Others stress the necessity to develop appropriate auditing and monitoring mechanisms 3/. There are also studies which insist on giving a priority to institutional building in such aspects, as: establishing consistency between the functions of an institution and the socio-economic environment of a country; or developing flexible mechanism of the interaction between institutions.4/ Finally, the most recent studies draw attention to the interrelation between macroeconomic policy and institutional performance, in which the former is regarded as an important determinant of the latter's behaviour.5/

Comparative analysis of the financial institutions in the least developed countries has shown that all above-listed factors play a certain role in determining these countries' institutional performance. They have also indicated that the adjustment of an implanted institution or the modification of the functions of an institution in consistency with the economic policy goals should be based on a deep understanding of the very nature of the process of institutionalization.

A. The Botswana Development Corporation

Development finance corporations of the least developed countries have often been under criticizm for having become inefficient and unable to achieve their purpose. According to a World Bank study, many development finance corporations have accumulated arrears, continue to rely heavily on government and foreign resources, and have trouble recruiting and retaining competent

staff. The cause of these problems has several roots. Being medium- and long-term lending institutions development finance corporations are vulnerable to business cycle fluctuations. This vulnerability has been further aggravated by inefficient diversification of risk of their lending operations and the lack of data on their borrowers.

In addition, development finance corporations have suffered from excessive political and governmental interference, directly or indirectly. For instance, governments of many least developed countries have regarded the nomination of their representatives for the Board of development finance corporations as a matter of political significance or as a way to ensure a desired pattern of credit allocation. As a result, in many cases credit allocation, as well as the conditionality of lending, have been predominantly influenced by social or ideological considerations.

The performance of development finance corporations has also been impeded by other forms of government's credit control. For example, agricultural development corporations have been required to finance small farmers although both the transaction costs and risk of lending are relatively high. Also, the lending and repayment criteria in respect to small farmers have not been appropriately designed. This has resulted in the erosion of financial discipline and the accumulation of losses by corporations.

Finally, since most state-owned development finance corporations tend to be assigned multifarious objectives (which may be competitive or contradictory) without clear guidance as to priorities or trade-offs among them, the pursuit of one purpose has often undercut another. However, some development finance corporations have succeeded in implementing their primary objectives. Among them a noticeable example is the Botswana Development Corporation.

1. The Design of the BDC

Since its independence, Botswana, as many other developing countries, has given high priority to the development industry, which was regarded as a key means of diversifying exports and of creating employment. However, to implement this objective, Botswana has had to overcome significant obstacles, such as a small domestic market, an embryonic national private sector, the lack of a skilled labour force, and an unfavourable communications system.

With regard to the given conditions, the Government of Botswana has made considerable effort in creating the necessary infrastructure, establishing the requisite institutional framework and providing incentives to attract and induce investments in the industrial sector.

Given the lack of domestic entrepreneurs and investment potential of the national private sector, the government established the Botswana Development Corporation (BDC) in 1970. The BDC was assigned to identify and promote productive enterprises and to locate foreign investors interested in launching a joint venture with the BDC.

According to the BDC's Memorandum of Association, it was not definitely limited to any particular field of activity and operations, but as far as the basic principles are concerned, they were clearly formulated. As it was stated in the Memorandum of Association, the BDC "shall conduct its business affairs upon a commercial basis, and in a prompt, efficient and economic manner. It shall exercise special care and give due regard to the economic and commercial merits of any undertaking it promotes, assists, finances or manages, so that, taking one year with another, it shall not be allowed to operate at a loss, however, though each such undertaking should be evaluated strictly on its merits, nevertheless such evaluation should include

consideration of the overall, long-term economic interests and benefits to Botswana".6/

Thus, the main objectives of the BDC are:

to create and/or; to promote, in Botswana, commercially and economically viable businesses which either because of the nature of their products or services or because of the manner in which they are operated will contribute to national goals as stated in the National Development Plan.7/

The investment policy of the BDC has also been precisely formulated. It was allowed to provide lease or loan finance to, or participate as an investor in, an enterprise when the following conditions are present:

(1) to become viable an enterprise needs external financial and managerial assistance;

(2) BDC's active presence at a policy-making level will constructively influence an enterprise with respect to national goals;

(3) BDC's investment is likely to generate additional resources for reinvestment by the Corporation.

The provisions of the BDC's investment policy envisaging possible risks established some limitations on major involvement of the Corporation in the promotion of enterprises and in property development. The volume of BDC's loan and capital share in any one project should not exceed 25 per cent of its net worth, except in the case of a subsidiary company. However, even in the latter's case, BDC's financing should be limited to 50 per cent of the project's capital cost. BDC's aggregate equity investments should be kept within its net worth.

An important reservation concerning the BDC's relationship with enterprises has also been stipulated by the BDC's investment policy. Under

normal conditions, BDC should not interfere in the management of an enterprise, although it could use its best endeavours to ensure the acquisition of competent management and take an appropriate action when a project supported by it is in jeopardy in order to protect its investments.

Financial support for the BDC was coming mainly from the Government of Botswana. The latter contributed to the BDC's initial resources by entrusting to it the sugar import trade into Botswana. The revenue before taxation originating from this trade allowed the BDC to develop a relatively significant equity base. As of 30 June 1983, BDC's paid-in capital was P5,145,000 of which 76.7 per cent was in ordinary shares, all owned by the Government of Botswana, and 23.3 per cent in 8.5 per cent cumulative redeemable non-voting preference shares held by the Netherlands Finance Company for Developing Countries, German Finance Company for Investment in Developing Countries, and International Finance Corporation.

2. The BDC's contribution to national development

Since its inception, BDC has been acting mainly as a property developer. Its investments in the property sector involved industrial estates, commercial and residential buildings, farms and others.

By 1983, the BDC established 26 subsidiaries, of which 14 were wholly-owned and 12 joint-ventures, 8 associated companies and five other enterprises.[8/] On 30 June 1987, the number of BDC subsidiaries reached 35 and that of associated companies, 17.[9/]

In the 1970s, the major emphasis in the investment policy of the BDC was on the development of industrial and commercial properties, a share of which was about 75 per cent. [10/] Another sector that received significant attention was tourism. Its share in total BDC investments, including hotels, was about 22 per cent on the average during 1974-1987.[11/]

BDC investments in manufacturing including breweries, furniture workshops, garment factories, and a concrete products enterprise. Among the enterprises established by BDC are "Botswana Breweries", "Kgalagadi Breweries", "Botswana Tyre Corporation", "Botswana Furniture Manufacturing", "Sugar Packers", "Kwena Concrete Products", "Botswanacraft" and others.

The Corporation has also been active in assisting the efforts of the Government of Botswana to ease infrastructure constraints by developing industrial estates, such as "Broadhurst Industrial Estate" in Gabarone and "Lobatse Industrial Estate".

Investments in the tourism sector included hotels in the main urban centers of Botswana and help in developing tourism in remote areas of the country which had considerable potential for attracting tourists.

In the agricultural sector, BDC subsidiaries have turned largely unused land into farmland which is now producing cotton, maize, wheat, citrus and vegetables.

One of the most successful agricultural projects was the establishment of the Talana Farm in the south-eastern part of the country, on the Limpopo River. At the request of the Government, BDC purchased four adjoining farms totalling 1,500 acres suitable for cultivation, but unused for several years, and hired experienced farmers on a renewable three-year contract to develop cotton, wheat and groundnut planting in this area. All these agricultural cultures are presently produced there.

Another example of successful introduction of new crops was Mogobame Dam Project, a joint venture between BDC and the Bamalete Tribe (west of Gabarone). The project resulted in inducing horticulture planting in this area and offering employment to more than 200 workers.

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In the financial sector, BDC is the second major source of long-term lending, after the National Development Bank (NDB). However, most of BDC's investments have been in the form of wholly-owned subsidiaries and joint ventures. Only since 1983 has it started a divestiture process at the recommendation of the NDB. For implementing this objective, BDC has established an Investment Trust, which is expected to dispose of BDC's mature investments in successful enterprises, at commercial prices, preferably to Botswana citizens.

The Investment Fund is also mobilizing the savings of Botswana citizens for investment in profitable enterprises. Those citizens who subscribe to the shares fo the Trust would qualify for dividends or profits distribution from the earnings of the Trust's investments.

Thus, as far as the first objective of the BDC is concerned - to build up new institutions in the environment where private entrepreneurship is virtually non-existent - the BDC did a commendable job in setting up a number of enterprises and in acting as a catalyst to attract foreign investors to Botswana. Its equity investments have grown from P2.2 million in 1979 to P48.5 million in 1987. 12/

Although in the past BDC's activities were heavily concentrated on financing comparativelly large-scale projects and still are at present, it has begun to diversify its lending policy in order to provide assistance to small-scale enterprises.

This new strategy was adopted by the Board of the BDC in 1982 and was embodied in the Corporation's Investment Policy and Procedures. Compared to BDC's Memorandum of Association of 1970, the new investment policy has expanded BDC's objectives and methods to promote the property development

process. BDC's new assignments include the following: a) provision of industrial and commercial properties in a manner which will encourage foreign investors to locate in Botswana; b) the use of guarantees to elicit finance for financially viable projects from third parties either directly for relatively large projects or indirectly through financial intermediaries for small projects; c) provision to Botswana citizens of orderly access to ownership of enterprises of proven viability; and d) assistance to small-scale enterprises through a separate company with its own investment policy and procedures.13/

However, BDC's progress in disinvesting, started since 1983, has been slow, so far, due to the extremely limited number of private Botswana investors.

Apart from creating production/service facilities in a number of economic sectors, BDC's operations have helped create over 6,800 direct jobs for Botswana citizens. Indirect impact of BDC on the employment situation is estimated at several thousand. 14/ Thus, about 2,500 people benefitted from indirect employment associated with the operations of BDC's industrial estate in Gaborone.

The Government of Botswana has been making attempts since independence to expand education and training services at a rapid pace, while at the same time making the best use of expatriates. The literacy rate has almost doubled and there has been a dramatic upgrading of the educational level of the labour force. The share of educated manpower in total labour force rose from 42 per cent to more than 50 per cent in the 1980s. However, while there is a surplus of primary school graduates in the supply of educated manpower, junior secondary school graduates and those with high education are still in short

The BDC, as well as other Botswana parastatals, has been trying to overcome this obstacle by drawing up programmes for staff development. In the 1970s, it established a scholarship programme at the University of Botswana, Lesotho and Swaziland and, in the early 1980s, sponsored several projects for higher education in Canada and Britain. Certain progress has been achieved in this respect. Compared to 1974, when only few of 35 BDC staff were Botswana citizens, in 1987, 74 of 89 were from Botswana, and of a total of 45 professional staff, 30 were from Botswana.15/ In the 1980s, the BDC established internal courses for staff-members, covering a variety of subjects, including secretarial, accounting and computer courses. Education and training services are not limited to BDC staff. The Corporation has been providing these services to different local companies, associations of producers and to staff-members of small subsidiaries who can not afford overseas training. Recent recipients of BDC services were for example the "South East Growers Association", "Botswana Mill Owners Association", and the "Forestry Association of Botswana".16/

3. Appraisal of the efficiency of BDC performance

BDC's financial results have varied widely since its establishment but its performance has been consistently strong. BDC's consolidated net profit as percentage of average equity was about 23 per cent per annum during1971-1987. Its long-term debt equity ratio improved from 1.75:1 on the average in the period 1974-1979 to 0.7:1 in 1987. 17/

In 1982-1987, BDC's consolidated equity increased more than twice, while BDC's equity alone grew three times (see table 1). The average return on consolidated capital employed was 10.2 per cent in 1983-1987. The turnover of BDC's group grew from P48.5 million in 1982 to P133.9 million in 1987.18/

Table 1. BDC's financial performance

(P'm)

	1982	1983	1984	1985	1986	1987
BDC's consolidated equity	19.6	21.9	24.3	29.5	33.9	48.5
Consolidated net profit	5.3	4.3	5.4	5.4	10.8	11.4
Return on consolidated equity, (percentage)	27.0	19.6	22.2	18.2	31.9	23.4
BDC's equity	11.7	14.7	15.6	24.2	24.5	33.6
BDC's net profit	1.8	1.7	1.8	0.4	1.8	2.5
Return on BDC's equity (Percentage)	15.4	11.6	11.5	1.8	7.3	7.4

Source: Based on BDC Annual Report, 1982-1987.

To a large degree, the success of BDC's financial operations could be attributed to its sound management. BDC carefully reviews the financial prospects of its investments at the close of each year and makes adequate provisions for possible debts. Those subsidiaries which are making losses are sold or reorganized in order to improve their performance. For example, in 1983, BDC sold its two small subsidiaries, a hotel company and a furniture company in Gaborone, which incurred small losses due to excessive debt, and reorganized Air Botswana, its other subsidiary.

This reorganization involved setting up a new subsidiary, Air Botswana Holdings (Pty) Ltd., of which Air Botswana itself became a wholly-owned

subsidiary. BDC became a shareholder of both companies. As a result of this reorganization, commercial principles of Air Botswana operations have been reinforced and the overall performance of the company has improved.

Although BDC has all along carried out an appraisal of investment proposals, only in 1983 did it prepare an Operational Manual in which its appraisal procedures were formally elaborated.

The Manual provides comprehensive guidelines for the preparation of proposals for the Board of the Corporation, standard loan conditions and the procedure for handling disbursement requests. Particularly, it established the provisions relating to maximum BDC exposure in a project and the estimation of the financial and economic rates of return. On the technical side, BDC has relied on foreign consultants, either to make feasibility studies or to check technical studies submitted by the foreign sponsors BDC associates with.

BDC closely supervises its projects whose executing agencies are required to submit quarterly progress reports and proforma financial statements, summaries of which are presented to the BDC Board for information at each meeting.

All BDC's subsidiaries, except BDC's real estate properties, have been given reasonable autonomy to manage their affairs. As far as the real estate subsidiaries are concerned, they are controlled and managed by the Manager of the Property Division of the BDC's Management Department. In the case of joint ventures, management is usually shared with the foreign minority investor. BDC also provides accounting services, at reasonable fees, to those subsidiaries which can not either maintain their own accounts at their locations or which are too small to provide separate accounting staff.

In order to improve its relationship with its subsidiaries, BDC has recently reviewed some of its procedures. For instance, there were some changes introduced in the procedure for financing capital investments of subsidiaries. In the past, BDC made loans to its wholly-owned subsidiaries with a nominal capital on a demand basis without fixed amortization schedules. This was done for specific purposes: (a) to take advantage of the tax regulations in force at the time; (b) to allow BDC flexibility in financial management through the centralization of cash flow from the subsidiaries; and (c) to cut down on administration costs during the early stages of their development.

However, this practice resulted in the subsidiaries having an unsatisfactory capital structure (excessive debt and financial charges) and insufficient autonomy to manage their financial resources. In this regard, BDC has undertaken some measures to restore the balance. It has provided its non-property subsidiaries with adequate capital and has established fixed amortization schedules for all its loans to these subsidiaries for capital expenditure. In the case of property subsidiaries, BDC is continuing its previous practice for the reason that it finds it more convenient and efficient administratively to control property subsidiaries centrally and not leave surplus cash balances with them. Disbursements of funds are made either directly to suppliers against invoices or through reimbursement of expenses already incurred by borrowers.

BDC has been pragmatic about the interest rate charged on its loans and has been adjusting the rate according to the economic situation prevailing in the country. Nevertheless, it also reviewed its interest rate policy in order to take account of the inflation rate, the interest rate structure prevailing

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in Botswana, and the spread required to enable BDC to cover its costs, provide for possible losses and generate a reasonable profit.

BDC has been expanding its lending operations since 1982 to non-affiliated companies. The overall long-term loans of BDC grew from P3.6 million in 1983 to P17.2 million in 1987. Although the main beneficiaries are still BDC's subsidiaries, their relative share in BDC lending has been decreasing, while shares of associated companies and non-affiliated companies have been growing (see table 2). For example, in 1983, the share of subsidiaries in total loans disbursed was 98.4 per cent, but those associated with BDC companies only 1.6 per cent. By 1987, the former's share declined to 61.3 per cent and the latter's to 22.1 per cent.

Since 1984, BDC has been rapidly expanding its lending to non-affiliated companies in line with a new government policy to provide financial support to medium- and small-scale Botswana enterprises. The latter is considered to have a substantial employment potential. According to World Bank estimates, in the early 1980s, 25,000 people (about 5 per cent of the active labour force) worked in the urban informal sector producing goods and services, not mentioning countless informal village industries producing handicrafts, food and beverages.19/

Table 2. Botswana Development Corporation lending
(P'000)

	1983	1984	1985	1986	1987
Total loans disbursed	3 617	8 [illegible]7	17 084	7 452	17 178
Loans disbursed to subsidiaries	3 560	8 487	11 778	6 428	10 537
Loans disbursed to associated companies	57	230	2 553	358	3 800
Loans disbursed to non-affiliated companies	-	150	2 753	666	2 841

Source: Based on BDC Annual Report, 1983-1987.

To deal with small-scale industries, BDC has established, in addition to the Investment Fund, two other subsidiaries "Tswelelo (Pty) Ltd.", whose main purpose is to finance small enterprises, and "The Partnership for Productivity (Botswana) Ltd.", a non-profit institution designed to provide assistance to small entrepreneurs in start-up, management, consultancy, accounting, etc.

As a result of these efforts, the lending rate of BDC's independent medium- and small-scale industries has grown substantially. Their shares in overall disbursed loans of BDC has increased from 1.7 per cent in 1984 to 16.5 per cent in 1987 (see table 2).

In many respects, the performance of the Corporation has relied upon the economic policy of the Government, as well as on its relations with other parastatals.

The Government has assisted BDC in its activities through the introduction of a number of incentives for foreign investors and local entrepreneurs. In the early 1970s, it set aside land for industrial use, providing tax incentives to prospective investors. The normal rate of corporate tax was established at the level of 30 per cent, which was the lowest in Southern Africa. Repatriation of profits was not subject to any restriction, after payment of a 15 per cent tax on dividends paid to non-residents.

The Botswana Government has also entered several investment guarantee agreements at that time, such as the International Convention on the Settlement of Investment Disputes and bilateral investment guarantee schemes (including the United States).

In 1982, having been dissatisfied with the results of its efforts, the Government reviewed its policies regarding investment incentives. The actions

stemming from a new strategy were the launching of the Financial Assistance Policy Scheme and the creation of the Trade and Investment Promotion Agency.

The assistance available under the Financial Assistance Policy Scheme consists of packages of incentives depending on the size of the firm and its expected economic rate of return. Each package is a combination of financial incentives, including tax holidays, subsidies for unskilled labour, training grants for off-the-job training, capital grants and sales subsidies. Furthermore, the Government implemented liberal exchange control policies and has provided direct assistance to enterprises (including necessary physiical infrastructure and other services), instead of providing protection from outside competition.

Although the Government owns BDC and five members of its Board are representatives of the Government, the Corporation has been acting within its mandate which ensures a relatively high degree of autonomy in the decision making process. The Government has also been able to establish a certain specialization between BDC and NDB to minimize the overlapping of activities. While BDC has been focusing on the promotion of investment opportunities in the modern business sector, NDB has been providing mostly short- and medium-term loans to small-scale enterprises in agriculture, commerce and industry.

B. Grameen Bank (Bangladesh)

One major constraint on growth and development in most least developed countries has been the low level of domestic resource mobilization (see table 3). In only a few least developed countries national savings have financed at least three-quarters of total domestic investment over the last 20 years, though, in all of them, the proportion declined from the mid-1970s onwards.

To ensure economic growth and social progress, these countries have been borrowing from international financial agencies as well as from private capital sources.

The necessity of a new approach to the problem of mobilization of private savings is almost universally acknowledged by governments of the least developed countries. To overcome obstacles to the expansion of domestic resource mobilization, it is considered important to further the national financial sector through establishing new types of financial intermediaries and diversifying functions of the existing ones.

As it is known, the main obstacle faced by the least developed countries in this field is a relatively significant non-monetary sector of the economy. In rural areas of most least developed countries saving and investment still take a form of real assets. Farm households save and invest by improving their land, building houses, making tools and other household goods, and building up inventories of commodities, especially food. Investment is limited to capital goods which the saver-investor can produce. Even when money enters the picture much investment is still self-financed. Savings are used to purchase real assets.

Nevertheless, recent studies on informal financial intermediaries (money-lenders, savings and credit associations and indigenous bankers) show that the scope of financial activity in a subsistence sector of the economy has been underestimated and its potential in terms of financial resource mobilization is not fully exploited. Moreover, in some developing countries, informal financial activity has been rapidly growing since the mid 1970s. Such phenomenon is traditionally explained by inability of existing formal financial institutions to meet the needs of rural households and

co-operatives, either because of high costs involved or lack of incentives to introduce innovative methods. The Grameen Bank Project provides important insights in respect to such considerations.

1. Appraisal of the performance of the formal financial institutions of Bangladesh

Past Bangladesh Government attempts to utilize the potential of the private sector, in terms of domestic resource mobilization, especially rural savers, have had little success. Although the scheduled banks have expanded their network in rural areas, still not all thanas (districts) and unions are equally covered. For 60 per cent of the villages the nearest bank is still about 4-5 miles away and often unconnected by any perennial road. The availability of banking services in rural areas is still far from being satisfactory. There are only 5.03 branches per 100,000 population and 3.56 branches per 100 villages.20/

Also, the banks have not been quite innovative in dealing with rural savers. Banking procedures to deposit and withdraw require a lot of paperwork. They appear cumbersome to an illiterate or half-educated rural depositor. Also, the interest rates offered by the banks hardly offset inflation. Hence a potential rural depositor finds it more profitable to invest in real estate or hoarding and speculation, rather than putting his savings in a Bank.

Lack of incentives and motivation for bank employees has had a negative effect on the performance of the banks. Also a certain role was played by a

cultural factor. Some observers indicated that both sides, employees of the banks and rural depositors, felt uncomfortable in dealing with each other, because of the cultural obstacles.

Finally, the bank methods of collection of deposits did not suit rural conditions of Bangladesh. They had to mobilize numerous small deposits which made their operations very costly.

Co-operative Banks of Bangladesh, the oldest rural financial institutions, have not also been able to expand the mobilization of rural deposits due to several deficiencies. Firstly, they offered the terms of liquidity and yield of the deposits similar to those offered by the scheduled banks. Secondly, compared to the scheduled banks, the co-operatives had much less diversified services. Thirdly, savings mobilization in the co-operatives mostly took the form of qualifying shares subscribed by the numbers and the weekly collection of the societies, involving also some paperwork.

Finally, the lack of qualified personnel has also undermined the performance of the co-operative banks.

Post Office Savings Banks, on the whole, have played a marginal role in the mobilization of rural deposits due mainly to limitations of handling and withdrawing operations. The proportion of rural deposits to all deposits mobilized by the Post Office Savings Banks has been stable since 1978, about 15 per cent.21/ Most rural deposits have been kept in the ordinary accounts reflecting high liquidity preference of rural savers.

Insurance Companies, despite their persistent efforts, have not been able to expand their activities in the rural areas on any significant scale. They have introduced several insurance schemes, such as: life insurance, property insurance, and crop and livestock insurance. Response of small farmers has

been rather modest. For instance, life insurance in the rural areas did not exceed 10 per cent of total life insurance.22/ According to some studies, the main obstacle faced by the Insurance Companies in rural areas is of psychological nature. Rural population is not yet accustomed to insuring life and property and has little confidence in these new forms of relations with outsiders, i.e. insurance companies.

Finally, the Bangladesh government established in the early 1980s the National Savings Bureaus to sell savings certificates and other instruments made available by the Directorate of National Savings, an office of the Ministry of Finance. Financial instruments offered by the National Savings Bureaus were specifically designed to improve domestic resource mobilization. The National Savings Bureaus together with the Post Office Savings Banks have been distributing and cashing different types of savings certificates and bonds, such as: Wage Earners Development Bonds, Five Year Savings Bonds, Defense Savings Certificates and others.

The government established favourable terms on these savings instruments in order to attract small savers. The interest rates paid on various certificates and bonds have been higher than those paid on comparable instruments issued by scheduled banks. Furthermore, the income earned from these certificates and bonds has been tax-free. Despite the high returns and tax-free status of the financial instruments issued by the Directorate of National Savings, the volume of savings mobilized has been relatively low. Some observers offered at least three reasons for this phenomenon: savers were wary about investing in government securities due to their negative past experience in dealing with formal financial institutions; the commission paid to the banks through which the Directorate was distributing government

securities was too low to motivate them to push sales of certificates and bonds; and the Directorate's publicity campaigns have been of limited scope and effect.

In addition to those presented above, some other attempts to expand rural savings mobilization worth to be mentioned. This is Rural Finance Experimental Project launched in 1977. The Project was jointly sponsored by the Government of Bangladesh and the United States Agency for International Development under a seven million dollar grant agreement.

The Project was aimed at experimenting with the most deprived rural groups which had little or no access to institutional credit. The overall purpose of the project was to identify a self-financing credit system which would help to generate employment and to raise income of these groups. Eight different models of delivering credit and mobilizing savings from the rural poor have been introduced through participating insitutions: the Nationalized Commercial Banks, Bangladesh Krishi Bank, Bangladesh Samabaya Bank and Bangladesh Rural Development Board. The activities of the project were carried out through 98 outlets in 19 districts of the country. Both loans and savings were administered at experimental interest rates varying from 12 per cent to 36 per cent and from 11 per cent to 15 per cent.23/

Some banks (Sonali Bank, Agrami Bank, Rupali Bank and Bangladesh Krishi Bank) were involved in experiments on individual lending, others (Jonata Bank, Uttara Bank and Bangladesh Rural Development Board) on group lending.

By 1982 more than 43,000 families had been covered by the project, and the total loans disbursed accounted 134.55 rores taka.24/ The average saving rate, however, was only 7.7 per cent of the amount disbursed and 16.0 per cent of the outstanding loans. The latter ratio varied significantly. Thus, in

case of group saving model conducted by the Grani Bank, the ratio was 35.1 per cent, while in case of family model introduced by the Pubali Bank, it was lower than the average on, 4.1 per cent.25/

The further examination of the results of the project revealed that not only the type of savings model had been responsible for the differentiation of the saving ratio, but also a method of savings mobilization applied by the participating institutions.

Five participating institutions in that project followed a compulsory method of savings while the rest applied a voluntary method. The former method involves a mandatory deposit by a borrower in a lending institution before a loan is disbursed or a certain percentage of the loan is deposited in an account of the borrower. However, the amount of deposits, whether deducted from or pre-requisited to a loan, varied from one institution to another. In case of the voluntary savings method, a built-in pressure was brought to bear upon the borrowers by the official of the lending institution with a view to fulfill their targets.

Summarizing the overall results of the Rural Finance Experimental Project, the Terminal Evaluation Report concluded that the savings mobilization was of a limited scope because it had been subordinated to the lending institution.

As the Report pointed out, 66 per cent of incentive scheme were used for lending and collecting payments rather than for motivating savers. Also, the participating institutions were reluctant to accept deposits at high rates.26/

Nevertheless, the results of the experiment indicated that in general deposits in rural areas were interest elastic. Thus, despite limited success, the project contributed to the study of rural savers' behaviour in Bangladesh.

Lessons learned from the experience of the formal financial institutions in Bangladesh could be formulated as the following.

Firstly, most institutional forms for providing financial services in rural areas have had serious shortcomings. Almost all rural financial intermediaries have stressed low interest loans for agriculture and have neglected savings mobilization. Secondly, policies, not organizational form, appear to be the main determinant of institutional success or failure. These policies, pursued by the Bangladesh formal financial institutions, have usually overlooked the distinction between real and nominal interest rates and have generally failed to recognize the importance of effective, as opposed to stated interest rates, in addition to the relationship between interest rates and transaction costs. Thirdly, it appears that those institutions, which have been taxed through interest rate ceiling or targeted credit programmes, tend to flounder and run into losses. Finally, rural savers showed substantial responsiveness to appropriate policies such as high interest rates.

2. Grameen Bank blueprint

In view of the limitations of the formal financial institutions to deal with rural population a pilot project was initiated in 1976 within the area near Chittagong University. It aimed to test the hypothesis that if financial resources are made available to the poor at reasonable terms and conditions they can generate productive self-employment without any external assistance. In three years the project having been overwhelmingly successful was formally launched in November 1979 in Tangail with financial support from the Bangladesh Bank. In April 1982 it was extended to Dhaka, Rangpur and Patuakhali districts, and, finally, was transformed into a scheduled bank called Grameen Bank in September 1983. Its initial capital of Tk. 80 million

with paid-up capital of Tk. 30 million was shared by the borrowers (40 per cent), the Bangladesh government (40 per cent), the Bangladesh Krishi Bank (10 per cent) and the Sonali Bank (10 per cent).27/

The mode of operation of the Grameen Bank was as following. A bank mobile unit is set up with a field manager and a number of bank employees. At the experimental stage these units were attached to an existing branch of scheduled banks or the Bangladesh Krishi Bank. Later, they were given an independent status as the Grameen Bank branches.

Each unit covers an area of about 15 to 22 villages. Any person belonging to a household owning up to 0.5 acre of cultivable land is eligible for the loan. Taking into consideration that most of the target group are illiterate and not accustomed to deal with the formal financial institutions, the banking services have been brought to their door steps.

At first, the employees of the units move around the villages to identify the perspective clientele by explaining the purpose and functions of the Bank. To get credit the loanee must belong to a group of five persons with similar economic and social status. Each group elects its own chairman and secretary and must hold weekly meetings. The groups are united into a centre and the elected centre chief conducts weekly meetings of the groups and carries the surveillance of the rules prescribed by the Bank.

Relatives or males and female members cannot form one group. All eligible male groups formed in a village constitute the Village Landless Association while the eligible female groups form the Village Women Association.

Loans are provided either to individuals or the groups. The loanee alone is responsible for his loan although some kind of informal interlocking

responsibility among members of the groups exists. The nearly-formed groups, as a rule, are kept under observation for a month to see if the members are confirming to the discipline of the Bank. During this period they are taught by the bank employees how to put their signatures. After the observation period is over, two members in the group are selected for taking loans. The loanee can use the credit in any productive activity of his own choice. The loan is to be repaid in weekly installments of 2 per cent of the loan value. The loan utilization and repayment behaviour of the first two loanees are observed for a month or two. If these members of the group behave properly, the rest also become eligible for receiving credit. However, if one of the members defaults, the whole group becomes ineligible to get repeat loans. These terms constitute a certain pressure on the group and work to keep the records of individual members clean.

The involvement of the Bank employees is not limited by the observation of the first loanees' behaviour. Their functions include direct participation in disbursement of loans and collection of repayments. The Bank employees attends the centre meeting where loan proposals of individual members are discussed. Once a loan proposal is accepted, the credit is disbursed by the Bank employee in weekly meetings. He also collects the weekly installment of the repayment during the weekly meeting of the centre. Thus, the Bank employee plays the role of an intermediary between the loanee and the Bank.

As far as the development of a saving habit is concerned, the rules of the Bank provide an additional condition of the loan. The group members are obliged to save one taka every week plus five per cent of the loan amount, which is kept aside at the time of loan disbursement. The savings form the Group Fund from which the members could borrow at times of need, at terms to

be determined by the group. However, group members do not have individual claim on the group fund, which means, that in case of leaving the group the member cannot ask for the money saved on his account.

Another fund called Emergency Fund is created by the members for insurance against default, death, disability and other accidents, with additional payment of 25 per cent of the interest due on the loan is fully repaid.

3. The effectiveness and efficiency of the Grameen Bank operational activity

Starting its operations in November 1979 with only two branches in Chittagong, the Grameen Bank was able to expand into several other districts (Tangail, Rangpur, Dhaka, Datuakhali), and by the end of September 1984, it had 108 branches serving to 110 thousand. The cumulative amount disbursed by that time stood at Tk.406 million. Of this amount, Tk. 17 million was disbursed by 1980. Between 1980-83 the amount of new loans disbursed reached Tk. 123 million. The amount disbursed during only three quarters of 1984 was nearly double that one disbursed in 1983 (see Table N4).

The increase in banking services provided by the Grameen Bank branches could be measured by the amount of outstanding loans per branch, as well as by the number of villages and members served by each Bank branch. According to some estimates, the amount of outstanding loans per branch in the Tangail district grew from Tk. 0.84 million in 1981 to Tk 2.07 million in September 1984. The corresponding number of villages and members served also grew from 17 and 965 to 25 and 1198 respectively.28/

On the side of the loan repayment, the performance of the loanees was excellent. By the end of September 1984 Tk.252 million or about 62 per cent

of the cumulative disbursement (Tk.406 million) has already been recovered. All monthly reports of the branches showed the amount overdue as less than one per cent.

This calculation was based on a two-year repayment period as the money was borrowed from the Bangladesh Bank. In actual practice, however, the loanee is required to fully repay the loan within one year in 50 installments of two per cent of the loan per week starting from the second week after loan disbursement. If the loan is not fully repaid within 52 weeks, it should be regarded as overdue.

According to some estimates, the overdue cases were 2.5 per cent of the number of current loanees by November 1982. The amount overdue was 2.6 per cent. The repayment record was found to be better for female members as compared to male loanees. Within one year female loanees repaid 98.4 per cent of the loans, while male loanees reimbursed 96.8 per cent of the borrowed amount (see table N8).

The amount saved in group funds grew very rapidly. It increased from only Tk.1.6 million in 1980 to Tk. 19.4 million in 1983. By the end of September 1984, the overall group savings grew to Tk. 35.8 million (see table N6). The average savings per member was about Tk.324 which constituted about 10 per cent of the per capita income in Bangladesh.

The list of major activities being financed by the Grameen Bank is rather diverse and large. For male loanees 22 activities accounted for about 72 per cent of the loans disbursed in 1983. They included such activities as: paddy and rice trading, cattle fattening, milk cow raising, paddy cultivation and also some manufacturing activities (muri making, weaving, oil processing and other activities). In case of female loanees, a number of activities was

smaller, only 15, which accounted for 92 per cent of the total loans disbursed. Three activities (milk cow raising, paddy husking and cattle fattening) accounted for about two-thirds of the loans.29/

Since 1982 there has been a certain reorientation of the Grameen Bank financial policy towards the provision of a greater support of collective enterprises. Examples of such activity are investment in irrigation machines, installation of rice, oil and weaving mills, leasing of markets and ferry ghats, renting of agricultural land and others. More than one-third of the loans for collective enterprises in 1984 was used for joint farming and pisciculture (see table N7).

With regard to the costs of the Grameen Bank operations for the branch units, the available estimates show that they stand at about 4.2 per cent of the outstanding loan. The total costs of the branches come to about 14.1 per cent of the outstanding loan, including the cost of the fund borrowed from the Bangladesh Bank and the cost of maintaining the head and zonal offices which is charged at 1.5 per cent per annum on the amount outstanding with the loanees.30/ Since the experimental period the costs of running the branches has been diminishing due to the steady growth of the amount disbursed. Some observers assume that if the branches of the Grameen Bank are able to maintain their operations at least at present level they would earn a profit of about 2.6 per cent per annum with the current rate of interest of 16 per cent per annum.31/

The Grameen Bank should be viewed more as an institution for the development of rural poor rather than a purely financial intermediary. Its initial purpose was to provide credit to the poor at reasonable terms and conditions that they can generate productive self-employment and thereby

improve their economic condition. Credit is thus seen as a mean to the ultimate end of alleviation of rural poverty.

The success of the Grameen Bank in this respect could be measured by its impact on the levels of income of the poor. The available studies suggest that the Bank was able to contribute to improving the well-being of the poor - members of the Grameen Bank. The average per capita income in real terms increased from Tk. 1037 at the beginning of 1980 to about Tk.1374 by May - June 1982, i.e., it increased by about 32 per cent. The income of the poorest groups among the loanees of the Bank also grew. Compared to 1980, a share of households with per capita income less than Tk. 1000 per annum has diminished from 51 per cent to about 33 per cent by 1982. At the other end the proportion of households with per capita income above Tk.2000 increased from 4.8 per cent to 19.5 per cent correspondingly. If compared to the non-members' performance, the per capita income of the Grameen Bank loanees was about 10 per cent higher (see table N7).

One of the major factors behind the growth of income has been the generation of self-employment for the landless, especially for female adult members of the family and for those households which are headed by women. On the whole, the average number of workers has grown more rapidly among the Grameen Bank members than among the target group households in the control village. As a result, the proportion of the economically active population was about 30 per cent for the loanee household in 1982 compared to only 24 per cent for the non-member households.32/

The Grameen Bank impact on the development of the poor is not limited to the generation of self-employment. It has promoted new forms of social organization of the poor, i.e. collective enterprises, female associations and

others. It has also changed some traditional patterns of social relations in the rural areas.

Before the establishment of the Grameen Bank many non-farmers in the rural areas, particularly those employed in cottage industries and petty trade had to depend on village moneylenders for capital. Mohajans, or moneylenders, through exercising monopoly control on the input and product trade, extracted a large proportion of the value added in the non-farm sector. Due to lack of capital, many non-farmers were also forced to sell their services as labourers for a very low wage. This was particularly common in paddy husking and petty trade. With this regard the provision of credit resources by the Grameen Bank enabled non-farmers to become independent of rural informal financial intermediaries and helped them to retain the income extracted by moneylenders.

The indirect influence of the Grameen Bank on the well-being of the poor can be assessed by analysing the expenditure pattern of loanee households. The findings on satisfaction of basic needs indicate that the loanee households were better off in respect of almost all these aspects compared to the control groups. Over 83 per cent of the loanee households incurred some expenses on health compared to about 63 per cent in the control groups, and the average expenditure on health was about 80 per cent higher for the former group.33/

Thus, the analysis of the Grameen Bank activity indicates that it has made a positive contribution to alleviation of poverty in the area of its operation. The Bank generated additional employment and hence the increase in income of the loanees. It has extended credit services to the poor and developed banking and saving habits among them. Although the new system of rural credit operation introduced by the Bank is highly manpower intensive, it

can run the programme without providing any subsidy to the loanees. However, the question should be raised with respect to the Grameen Bank, whether its operational activity can be expanded to a wider scale and whether its experience can be replicated.

Some experts believe that the Grameen Bank activity can be extended despite some limitation from the demand side. It is assumed that as incomes of the poor, which constitute more than half of the Bangladesh population, rise, they start demanding products and services of one another thereby mutually expanding market. This will form a factor of growth and stimulate production and trading activities. This assumption is supported by the findings of some studies of the Grameen Bank experience. A large proportion of the additional income of the Bank loanees has been spent on food and other necessities produced outside the family. It was also found that about 43 per cent of the incremental income of the loanees are spent on non-food items and most of the non-farm products have elastic demand.34/

With regard to other constraint to the expansion of the Grameen Bank operation, i.e. low productivity of labour in the activities pursued by the loanees, it is considered that the further encouragement of collective enterprises can be a best solution of the problem.

Collective enterprises can reap economies of scale in business and can use improved technology and thereby increase labour productivity. However, the Bank has to introduce a separate repayment schedule for investment in improved technology. Until recently, collective loans for such investment grew at a slower pace than those for leasing of land and markets.

As far as the doubts on possibility of replicating the Grameen Bank experience in other least developed countries are concerned, there is some

reassuring evidence that it can be done. In 1987 a similar experiment in the paddy fields of Selangor, Malaysia, has been set up. The institution is called Amanah Tkhtiar Malaysia. Since that time, a number of loanees reached 300, mainly the rural poor. Repayment rate is very high, 90 per cent. Most families were able to improve their well-being and to diversify their productive activities, such as: ice-water stall, bee-keeping and crop-growing.35/

Concluding remarks

The above analysis of the experience of two financial institutions indicates that the obstacles to institutional development in the financial sector of the least developed countries could be overcome. The success of the Botswana Development Corporation and the Grameen Bank in many respect could be attributed to their design. Both institutions represent a replica of institutions of the industrial countries adjusted to specific socio-economic conditions of either Botswana or Bangladesh.

Compared to similar financial institutions of the developing countries, the Botswana Development Corporation and the Grameen Bank have been given a relatively high degree of independence in decision-making. The role of the governments has been limited as far as the operational activity of the institutions is concerned, although the governments have been either a full owner or a joint proprietor of the institutions.

Partly, a success of the Botswana Development Corporation and the Grameen Bank follows from an appropriate formulation of their strategy and an evolutional approach to the implementation of their strategic goals. Having started chiefly as experimental projects they have slowly spread their operational activity accumulating experience and knowledge about the

specificity of a geographic area, economic sector or a segment of population involved.

The experience of the Grameen Bank is also instructive with regard to the economies with a significant non-monetary sector or rural poverty. Its pioneer role, in fact, has consisted in forming a new pattern of social relations, developing new habits among rural poor. Such approach to a problem of involving rural poor in formal financial relations has proved to be more effective than forcing commercial banks or other formal financial institution to perform unnatural functions at the expense of their efficiency.

Table 3. Distribution of Gross Domestic Product of selected Least Developed countries
(in percent)

Countries	Gross domestic investment				Gross domestic savings				Resource Balance			
	1967	1977	1980	1987	1967	1977	1980	1987	1967	1977	1980	1987
Botswana	23.3	31.3	41.0	..	-8.4	14.3	28.5	..	-31.7	-17	-12.5	0
Burundi	6.9	11.1	13.9	19.9	5.8	11.4	0.3	7.7	-1.1	0.3	-13.6	-12.2
Chad	17.6	20.8	18.2	18.4	12.2	2.3	-6.4	-12.3	-5.4	-18.5	-24.6	-30.7
Ethiopia	14.3	8.8	10.0	14.5	11.7	5.7	4.9	3.3	-2.6	-3.1	-5.1	-11.2
Gambia	9.7	14.1	26.7	19.0	8.0	8.0	5.2	6.4	-1.7	-6.1	-21.5	-12.6
Guinea-Bissau	..	19.8	29.6	18.8	..	-3.5	-6.0	5.2	0	-23.3	-35.6	-13.6
Haiti	6.7	15.5	16.9	12.5	3.1	6.6	8.1	4.8	-3.6	-8.9	-8.8	-7.7
Lesotho	10.5	25.0	33.9	25.2	-30.1	-74.5	-66.2	-73.3	-40.6	-99.5	-100.1	-98.5
Malawi	13.5	24.7	24.5	14.0	2.7	20.1	10.6	11.6	-10.8	-4.6	-13.9	-2.4
Mali	18.4	16.5	17.0	16.5	5.2	9.3	-1.9	-0.4	-13.2	-7.2	-18.9	-16.9
Nepal	5.0	16.0	18.3	21.0	4.9	13.5	11.1	11.4	-0.1	-2.5	-7.2	-9.6
Niger	8.7	19.7	36.6	9.2	2.7	10.0	22.6	4.5	-6	-9.7	-14	-4.7
Rwanda	7.3	15.1	16.1	16.7	2.4	11.7	4.2	5.1	-4.9	-3.4	-11.9	-11.6
Somalia	12.0	39.1	44.2	34.8	3.4	0.2	-7.6	0.5	-8.6	-38.9	-51.8	-34.3
Sudan	12.9	17.1	15.1	11.2	14.5	10.7	3.4	6.2	1.6	-6.4	-11.7	-5
Uganda	13.3	5.5	6.1	12.0	14.2	6.8	4.6	4.8	0.9	1.3	-1.5	-7.2
United Rep. of Tanzania	17.9	26.1	23.0	17.0	18.2	22.8	9.8	-5.9	0.3	-3.3	-13.2	-22.9
Burkina Faso	10.8	26.4	20.3	15.7	-0.4	-3.5	-9.0	-7.7	-11.2	-29.9	-29.3	-23.4
Yemen A. Rep.	..	18.8	45.8	13.3	..	-31.3	-19.7	-20.5	0	-50.1	-65.5	-33.8
Bangladesh	10.7	12.0	15.1	11.5	3.5	6.9	2.1	2.2	-7.2	-5.1	-13	-9.3
Central African Republic	21.8	11.7	7.0	13.9	1.2	1.5	-9.6	-2.5	-20.6	-10.2	-16.6	-16.4
Sierra Leone	12.5	13.1	16.2	8.8	8.5	5.7	0.9	9.7	-4	-7.4	-15.3	0.9
Togo	12.6	34.3	29.9	17.3	13.3	16.7	15.0	5.5	0.7	-17.6	-14.9	-11.8
Mauritania	21.4	39.1	36.2	20.5	32.1	-1.3	6.9	13.7	10.7	-40.4	-29.3	-6.8
Mozambique	..	..	18.9	22.4	..	..	0.5	-9.5	0	0	-18.4	-31.9

Source: World Tables 1988-89 Edition. From the data files of the World Bank, Washington,D.C., 1989.

Table 4. PROGRESS OF ACTIVITIES OF THE GRAMEEN BANK, 1980- September 1984

ACTIVITIES	1980	1981	1982	1983	END SEPTEMBER 1984 Male	Female	Total
1. Villages covered (No)	363	433	745	1249	-	-	1988
2. No. of members enlisted (no persons)	14.8	24.1	30.4	58.3	50.3	60.0	110.4
3. Cumulative amount of credit disbursed (Million Tk.)	20.1	53.7	95.6	194.9	236.9	169.5	406.4
4. Cumulative amount of credit recovered (M. Tk.)	7.3	32.7	64.2	123.2	154.7	97.0	251.7
5. Amount disbursed during the year (Million Tk.)	17.1	32.6	41.9	99.3	105.6	105.9	211.5
6. Outstanding Loans (Million Tk.) 2	12.8	21.0	31.4	71.7	70.6	57.9	18.5
7. Amount saved in Group Fund and Emergency Fund (Million Tk)	1'6	4.8	9.6	19.4	21.2	14.6	35.8
8. Amount Outstanding per Branch (000 Tk)	533	1304	581	834	761	672	1,433

Source: GB Annual Reports, 1980, 1981, 1982, and 1983.
GB Monthly Statement for September 1984.

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Table 5. AMOUNT OF OVERDUE LOAN BY PERIOD; END NOVEMBER, 1982

Loanee Type	Loanees who have not Fully Repaid the Loans within 52 weeks			Amount of Loan Overdue after One Year of Contracting		
	52-77 weeks	78-103 weeks	Over 103 weeks	52-77 weeks	78-103 weeks	Over 103 weeks
	(Number)			(Thousand Taka)		
Male Loanee						
Number/000 Tk.	247	116	47	334.9	138.3	42.8
Percentage*	1.8	0.9	0.3	3.1	0.8	0.3
Female Loanee						
Number/ Thousand Tk.	105	32	1	89.0	27.7	1.3
Percentage*	1.2	0.4	-	1.2	0.4	-
All Loanee						
Number	352	148	48	424.7	1.3	44.3
Percentage*	1.6	0.7	0.2	1.8	0.6	0.2

*For defaulting loanees the percentages are of the total number of current loanees, and for overdue loans the percentages are of the total outstanding loan.

Source: Mahabub Hossain. Credit for the rural poor: the Grameen Bank in Bangladesh. Dhaka, 1985, p. 64, Table 3.13.

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Table 6. LOANS DISBURSED FOR VARIOUS TYPES OF COLLECTIVE ENTERPRISES IN 1983, 1984

Types of Collective Enterprises	1983		January to June June 1984	
	'000 Tk.	Per cent	'000 Tk.	Per cent
Improved technology	1412	54.1	1539	12.7
Leasing of markets and ferry ghats	514	19.7	3018	24.8
Hoarding of agricultural produce	-	-	1070	8.8
Collective trading	-	-	1977	16.2
Cultivation and pisciculture	686	26.3	4566	37.5
Total	2613	100.0	12,170	100.0

Source: Grameen Bank, Annual Report, 1982, 1983.

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Table 7. INCOME OF LOANEE HOUSEHOLDS COMPARED TO CONTROL GROUPS, 1982

Variables	Project Villages G.B. Members (N=62)	GB Non-Members (N=127)	Control Village	Per cent Members over Non-Members	Difference Members over control
1. Per capita income(Tk/annum)	1762	1498	1346	17.6*	30.8*
2. Trade income (Tk.per household/annum)	2555	1190	2702	114.6*	-5.5
3. Industrial income (Tk. per household per annum)	1510	768	540	96.6	179.6
4. Wage income (Tk. per household.annum)	1680	1771	1754	-5.1	-4.3
5. Income from livestock & paultry (Tk. per household/ annum)	190	152	106	24.4	79.5

*The difference is statistically significant at five per cent probability error.

Source: Mahabub Hossain. Credit for the rural poor: the Grameen Bank in Bangaldesh. Dhaka, 1985, p. 98, Table 5.2.

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Footnotes

1/ See: J.D. Von Pischke, Dale W. Adams, Gordon Donald. "Rural Financial Markets in Developing Countries". Baltimore and London, 1983.

2/ See: The World Bank. World Development Report 1989. Financial Systems and Development. World Development Indicators. Washington, D.C., 1989.

3/ See: Botswana: Financial Policies for Diversified Growth. Document of the World Bank, Washington, D.C., 1989.

4/ See: Improving Domestic Resource Mobilization through Financial Development. A Study by the Economics Office. Asian Development Bank. Manila, 1985.

5/ See: The World Bank. World Development Report 1989. Washington, D.C., 1989.

6/ The World Bank. Appraisal of Botswana Development Corporation. Report No. 394a - BJ, Washington, D.C., June 6, 1974.

7/ Ibidem.

8/ Ibidem, p.3.

9/ The World Bank. Staff Appraisal Report. Botswana: Second Development Finance Companies Project. Washington, D.C., January 26, 1984, p. 61, Annex 4.

10/ BDC. Annual Report (87), p. 15.

11/ The World Bank. Appraisal of Botswana Development Corporation. Report No. 394a - BT, Washington, D.C., June 6, 1974, Annex 11.

12/ Based on: BDC Annual Report (83) and (87).

13/ Based on: BDC Annual Report. 1980 - 1987.

14/ The World Bank. Staff Appraisal Report. Botswana: Second Development Finance Companies Project..., p. 54.

15/ The World Bank. Economic Memorandum on Botswana. Washington, D.C., October 15, 1985, p. 18.

16/ BDC Annual Report (87), p. 13.

17/ Ibid., p. 3.

18/ Based on: BDC Annual Report. 1983-1987. The World Bank. Staff Appraisal Report. Botswana: Second Development Finance Companies Project. Washington, D.C., January 26, 1984.

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19/ BDC. Annual Report (87).

20/ ESCAP. Mobilization of Rural Savings in Bangladesh. Prepared by Mr. Mohammad H. Rashid. 17 December 1987. DP/WMD SL/1, p. 16, Table 2.1A.

21/ Ibid., p. 25, Table 2.7.

22/ Ibid., p. 28.

23/ Ibid., p. 29.

24/ Ibid., p. 29.

25/ Ibid., p. 30.

26/ Ibid., p. 30.

27/ Mahabub Hossain. "Credit for the Rural Poor. The Experience of Grameen Bank in Bangladesh". Dhaka, 1984, p. 6.

28/ Ibid., p. 47.

29/ Ibid., p. 53.

30/ Ibid., p. 127.

31/ Ibid., p. 74.

32/ Ibid., p. 104.

33/ Ibid., p. 110.

34/ Ibid., p. 130.

35/ UNDP Co-operation. South. 1989, No. 3, p. 23.

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1 March 1990

Chapter 4

Institutional development in agriculture

Introduction

In all least developed countries, the population is largely rural and the proportion of the economically active population employed in agriculture was 70 per cent or more in most of them in 1987. The share of agriculture in the gross domestic product of most of these countries was over 40 percent and the share of agricultural exports in total export earnings was also 50 per cent or more in most of these countries in the mid-1980s (see Table 1). Where the share of agricultural earnings in financing imports is low, the countries are heavily dependent on mineral exports,as in Botswana, Guinea, Mauritania and Niger.

The crucial role of agriculture in these countries explains why governments have been so concerned with land tenure, financing, research and extension services in the agricultural sector. There have been success stories and failures but events have often undone the efforts - drought in the Sahel region in 1971-73 and again in 1982-84, locust infestations in Africa and western Asia in the mid-1980s, floods, cyclones and tidal waves in some of the Asian and Pacific countries, war and civil war.

Most least developed countries maintained positive growth rates of total agricultural and food production during the 1960s, 1970s and late 1980s. But when population growth rates of more than 2.5 per cent per year are taken into account, the per capita growth rates of agricultural and food production were negative in most cases (see Table 2).

The low use of modern agricultural inputs - chemical fertilizers, tractors and insecticides - in the least developed countries is one of the main reasons for low agricultural productivity in these countries. Rain-fed agriculture limits production to certain times of the year. The fertility of the soils in some countries has been eroded. The use of animal manure, if available, as fertilizer has to compete with its use as fuel, too. Traditional farming tools are not adequate for cultivation to feed growing populations. Yet, the contribution of the use of these modern inputs to the success of the Green Revolution in increasing cereal production is not lost on the least developed countries. Governments in these countries are revamping the land tenure system and promoting farmers' co-operatives and state farms to make these inputs available to farmers, usually at subsidized prices, so as to promote production and productivity and increase food security. However, budget deficits have forced governments to reduce subventions for such purposes.

Institutions to conduct agricultural research and to disseminate the research results through extension were also established, the dominant theme during the 1960s, 1970s and 1980s being self-sufficiency through the application of science and technology. The disastrous harvest of the early 1970s coupled with the depletion of world cereal stocks for food aid led to the World Food Conference of 1974 and left a strong impression.

The rest of the chapter reviews the objectives and functions of the institutions common to most least developed countries. The institutions discussed are land tenure systems, resettlements (or villagization), farmers' co-operatives, state farms, modification of the African system of communal land ownership and agricultural research and extension.

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A. Land tenure systems

Land tenure determines access to land and natural resources and affects production and productivity through the incentives and the security it provides for production and investment. Lack of access to land by large numbers of rural population has adverse implications for socio-economic growth as well as equity. In many least-developed countries, small farms play an important role in providing income, employment and food security for a large part of the population. Therefore, it was believed that a wider distribution of land, accompanied by the availability of modern inputs and infrastructure and changes in production structures, farming systems, technological systems and delivery systems based on small farmers' needs would result in increased output, income and employment of the rural poor.

In Asia, where the pressure of population on land is higher - the ratio of population per square kilometre in Bangladesh was 700 in 1986, 121 in Nepal (1986) and in Afghanistan 29 (1986) - and where landlessness or nearlandlessness is widespread, agrarian reform took the form of land redistribution to the landless or near-landless. In Africa, on the other hand, where the population to land ratio is not too severe and cultivators live in dispersed hamlets over large expanse of land inaccessible by modern road transportation - the population per square kilometre in Ethiopia was 36 (1986), in Mozambique 18 (1986) and 24 in the United Republic of Tanzania (1986) - agrarian reform was directed at resettling people on supposedly empty lands. In spite of the measures taken, the distribution of land ownership remained skewed in the Asian countries. Both land redistribution and resettlement met with limited success in the least developed countries, the former principally because landed interests resisted the purposes of the land

redistribution laws and regulations and the latter principally because the resettlements were often ill-planned and poorly executed. They also lacked the resources for the socio-economic infrastructures required as well as the trained manpower to carry out the programmes.

1. Land redistribution

Land reform in Bangladesh has a chequered history, and the measures enacted since the 1950s have not been enforced vigorously in present-day Bangladesh due to the power wielded by the landed interests. After the partition of the Indian sub-continent into India and West and East Pakistan (present-day Bangladesh), the East Bengal State Acquisition and Tenancy Act (EBSATA) sought to redress the inequitable landholding system by the following measures[1/]: 1) abolition of the zemindary system, established by the British, whereby the zemindars, the traditional revenue collectors, had absolute proprietary rights in the land and, in return, brought most of the rents they collected from tenants and sub-tenants to the government; 2) the imposition of a ceiling on cultivable land at 33.3 acres and on homestead land at 3.3 acres per household; and 3) the redistribution of excess land to bona fide farmers having less than 3 acres. The redistribution was not very effective as only a small proportion of the potential excess land was recovered. Moreover, the landless were not accorded priority in the redistribution exercise. A priority list was drawn up in 1957 and amended in 1960, 1962 and 1963 but the small farmer and the landless sharecroppers were not given priority. In fact, powerful interests were able to prevail on the government to raise the ceiling of land per family to 125 acres by the 1961 amendment.

After East Pakistan became Bangladesh in 1971, the government continued the land reform measures by amending previous Acts. Presidential

decrees of 1972: 1) exempted households having up to 8.33 acres of land from land tax, though they had to pay other taxes such as development tax and education cess and 2) reduced the ceiling on land that could be held by a family to 33.3 acres. People got around this provision by redefining "family" to comply with the decree and splitting land into different ownerships of people in the same family in different districts. The result was that only an insignificant proportion of families (5,317) gave up an especially insignificant proportion of land (76,700 acres).

A Land Reform Committee set up made the following recommendations in 1983; 1) a ceiling per family of 25 acres in irrigated areas and 33.3 acres in non-irrigated areas; 2) a lower ceiling of 10 acres per family of absentee owners for irrigated areas and 16.6 acres for non-irrigated areas; 3) permission to buy land up to a total ownership of 19.8 acres; 4) security of tenure for five years for sharecroppers; 5) the setting of agricultural wages at 3.28 kg. of rice per day or its equivalent in money; 6) the distribution of khas lands to the landless or near-landless and 7) the division of output between the sharecropper and the landowner by a system called "Tevaga" by which one-third of the output was allocated to land, one-third to the labour (of the sharecropper) and one-third to the owner of the inputs.

In 1985, the government fixed the maximum amount of landholding at 20 acres. The implementation of the land reforms was ineffectual. "In many places, the land reform so far undertaken has to a certain extent remained on paper only".2/

However, by 1987 this much had been achieved: about 31,400 acres of land had been distributed among landless and marginal farmers. It was estimated that there were 7,810,310 functionally landless households in

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Bangladesh. About 1.2 million had neither homestead nor cultivable land while about 2.7 million had a homestead but no cultivable land. Land was distributed among these groups. The remaining households - about half of the total functionally landless - had homesteads and cultivable land of up to 0.50 acres and did not benefit from the land distribution.

Moreover, the maximum holding of 20 acres by an individual is exceeded by many landlords who use all sorts of ruses, including fictitious transfers to the names of family members, relatives and servants to evade the law. "In contemporary Bangladesh, the relations of the people to the land have remained relatively unchanged since the nineteenth century, despite the legislation enacted since partition in 1947 and independence from Pakistan in 1971. Absentee landlords are still abundant in Bangladesh posing as owner-cultivators."3/ In fact, landlessness is reported to have risen in the 1980s, and the number of functionally landless peasants - those who own less than half an acre (0.2 ha.) of land, - was estimated to be growing by about 2.2 per cent per year.4/

In Afghanistan, a land reform programme was initiated in 1976. But the "confiscation and redistribution of land generated widespread resistance and in mid-1981, the government was forced to exempt religious and tribal leaders and army officers from the scheme"5/ and thus reduce the efficacy of the programme. Priority in the distribution of land confiscated was given to landless peasants serving in the armed forces. The land reform process entailed the establishment of state farms and farmers' co-operatives but hostilities in the country made the implementation of the programmes difficult.

A few sub-saharan African countries, for instance Lesotho and Burkina Faso, enacted land tenure laws which modified the traditional communal land

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ownerships. In Lesotho, where intense cultivation and grazing had depleted the lowland soil and had increased soil erosion, causing crop yields to decline and where uncontrolled upland grazing , under the traditional communal grazing rights, also caused serious soil erosion which adversely affected livestock production, the government sought to arrest this trend and bring about environmentally sound and sustainable development by a Land Husbandry Act (1969) which permitted the control of grazing. Ten years later, another law introduced leases to the system of land tenure, and in the 1980s, villagers were brought into the picture - to participate in decisions regarding land use management and conservation, a time-honoured African participatory decision-making process. Elected Village Development Councils in village clusters were made responsible for developing resource management plans for land use, conservation, grazing and other related problems, such as agro-forestry, water supply and roads. This met with acceptance.

A similar land planning institution at the local level, using local chiefs and villagers, was developed in Burkina Faso in the late 1980s.

2. Resettlements

In Ethiopia, the Land Reform Proclamation of 1975 laid down the basis of the socialist agrarian policy of the government of Ethiopia. An essential part of this policy was "planned resettlement" by which the government assumed the responsibility of settling peasants who had little or no land or to establish cottage industries in which the landless could work. Nomadic people were also to be settled to sedentarize them for farming purposes after the government had improved the grazing areas and had dug wells. The settlements were to provide a pool of human resources not only for settlement farms but also for co-operatives and state farms.

By 1976, there were[6/] 88 settlement centres with 38,800 households; and by 1982, the number of settlements - both Relief-Rehabilitation and Regular Settlement centres - had increased to 386 with a settled population of 589,800 people. But only 27 of the settlements were deemed to be self-sufficient. Also, by 1976, while settlement farms of 37,300 hectares accounted for only 0.5 per cent of the total cultivated land, by 1983 the percentage had increased by 8 per cent to 40,000 hectares. However, in spite of the land and the amount of capital alloted to the settlement farms "their contribution to the country's crop production is far inferior to that of the private small peasant producers".[7/] The lack of trained manpower and of clear-cut ownership rights bedevilled the settlement schemes. The failure of the resettlement schemes became evident when drought devastated crop production in the early 1980s and famine struck again.

In spite of this, the government of Ethiopia planned to resettle 1.5 million of the estimated 8 million people affected by famine in areas not devastated by the scourge. This was to have the dual purpose of making immediate famine relief possible to a conglomeration of people rather than to homesteads scattered over wide, inaccessible areas and also as the foundation for a strategy of famine prevention and food security, since the region struck by famine had infertile, overused and overgrazed lands.

The government's policy of resettling people from the drought-afflicted highlands in the lowlands of the Metekel region which had little rainfall (400-800 mm of rainfall during the rainy season) encountered additional difficulties of high mortality rates resulting partly from such diseases as malaria and bilharzia to which the new settlers were not inured. and difficult climatic conditions not prevalent in their former habitat.

By late 1985, 30,000 dwellings had been built in 109 new villages and by early 1986 about 101,100 people had been resettled in these villages. But the clearing of the vegetation and forests on such a massive scale for farming and gardening and of trees, such as bamboos, acacia and gum for building the dwellings had an adverse effect on the ecosystem of the Metekel region. Moreover, the way of life of the new settlers was different from that of the Gurmuz, the predominant people in the Metekel region who practised shifting cultivation and allowed their land to lie fallow for some years before being cultivated again. "The establishment of settlements in areas already inhabited by Gurmuz people has brought about the loss of their traditional land and heightened the existing problem of land scarcity in the region, disrupted their agricultural and non-agricultural modes of appropriation and has introduced ecological problems". 8/

The main objective of the Government of Mozambique's policy of "socialization of the countryside" was to establish communal villages and co-operatives so as to change the dispersed way of living of most of the poeple and transform the peasant sector. This regrouping of a dispersed population into villages was meant to build a social structure and entity for wider economic, political and administrative purposes. It had its genesis in the 1960s when the people were fighting for their independence from colonial rule and had to bring together, for security reasons, people whose hearts and minds they had won over.

After the country became independent in the 1970s, the government tried to adapt the resettlement into communal villages into organs for increasing agricultural production and productivity and also for improving rural life. By the mid-1980s, 9/ more than 1350 communal villages with a

population of about 1.8 million people - about 15 per cent of the total population of the country - had been set up. Each village had a minimum of 250 families and elected its own general assembly and executive committee.

A communal village has agricultural production co-operatives and consumer co-operatives. Some of the communal villages are big (with 4,000 to 5,000 inhabitants) with semi-urban services, roads, and potable water; others are medium-sized, while some of the villages are starting.

The people who settled in the villages expected improved standards of living, the provision of social services and water supply. But lack of financial resources and of trained manpower, insufficient water and poor soil quality have plagued some of the villages. Moreover, hostilities in the country have adversely affected agricultural production as marauding bands of people opposed to the central government ravaged the countryside, maiming people and destroying crops in the 1980s.

The National Commission for Coummunal Villages was the administrative set-up responsible for co-ordinating the policies and programmes relating to the development of communal villages and reported directly to the Office of the President. But as from 1980, the Commission was moved to the Ministry of Agriculture to enhance its efficiency and co-ordination with agricultural policies. Provincial governments are responsible for the co-operativization and assistance to the family farm sector.

The villagization measures in the United Republic of Tanzania were attempts to set up institutions for rural transformation. Under the country's policy of "socialism and self-reliance", as enunciated in the "Arusha Declaration" of 1967, the government encouraged the grouping of scattered villagers and homesteads into "ujamaa" villagers which were to develop communal farming which would eventually replace individual private farming.

In agriculture, its main objective was to increase production and productivity and contribute to food self-sufficiency: a) by utilizing economies of large-scale production through the collective cultivation of block farms and communal plots; in other sectors, the collection of people scattered over areas into bigger entities could yield savings in the provision of social infrastrutures, such as education, health facilities, and water; b) by lowering costs and increasing efficiency in delivering agricultural inputs and marketing output; c) by providing access to transportation facilities, agricultural machinery and bulk purchases of goods and d) by bringing about more effective utilization of labour in public works - in the construction of roads, irrigation facilities and storage facilties.

The villagization process was made compulsory in the early 1970s and this proved its undoing as the fast pace of the resettlement of the rural population and its attendant inadequate planning disrupted the rural economy. The government had to relax its policy and allow the bulk of agricultural production to come out of the activities of peasant families. Also this "vast population movement upset farming activity and created location problems, the time taken to move between villages and fields became very long".10/

Villagization failed to attain several of its significant objectives. It did not lead to the utilization of the advantages of large-scale production. Also, although communal production has been made compulsory, communal plots account only for no more than 7 - 8 per cent of the total land under village cultivation.

Nor has it increased the productivity of labour. "A survey of 20 villages in 8 regions disclosed that communal farming appears to be less productive than family farming. The former took up 23 per cent of the

'villagers' labour time, but provided merely 3 per cent of the total output...Villagization has not contributed significantly to the application of improved methods of husbandry....Furthermore, villagization has not accomplished self-reliance and independent decision-making."11/

But agricultural production did not rise appreciably during the period due to several factors, such as inefficient management by parastatals responsible for purchasing agricultural produce, lower real prices paid farmers, inadequate supplies of agricultural inputs due to balance of payments stringency, shortages of basic consumer goods - clothing, footwear, soap - on which farmers could spend their money and which were a sort of incentive to production and heavy taxation of export crops which reduced producer prices. For example, the total taxation and marketing charges for four exports - coffee, cashew nuts, pyrethrum and tobacco - which averaged 33 per cent in 1971 had risen to 62 per cent by 1979.12/ This makes clear the obvious fact that the mere establishment of institutions in the agricultural sector will not lead to increased production unless they are accompanied, pari passu, by complementary resources, incentives to cultivators and sound government policies.

Other actions which adversely affected the villagers' productivity included regulations regarding minimum acreage, crop tending, the designation of export crops and food crops, for specific places and restrictions on freedom of movement. Usually such decisions are better left to the farmers whose knowledge of the soils good for specific crops is far superior to that of armchair agriculturists, who do not go to the rural areas to test soils and see things for themselves.

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3. Co-operative institutions

The establishment of agricultural producer co-operatives in Mozambique was part of the government's strategy of socializing agriculture. It started with former workers taking over the farms abandoned by their owners who fled the country when the country became independent in 1977. These workers wanted to reap the advantages of joint production and access to inputs.

Between 1977 and 1982,13/, the number of producer co-operatives more than doubled - from 180 (in 1977) to 370 (in 1982) - and the membership increased from 25,000 to 37,000 but the area cultivated was less - about 11,500 hectares in 1981/82, compared with 13,200 hectares in 1978/79 - and production was almost halved, 11,200 tons in 1978/79 and about 6,500 tons in 1980/81. Agricultural co-operative production was a small proportion of the total marketed agricultural production in Mozambique in the 1980s.

The agricultural co-operative movement was plagued by manifold problems such as lack of experience in organization and planning of production and accounting, unreliable services and poor advice, lack of direct support from the state, the non-participation of co-operative members in the planning process - targets were set at national and provincial levels without their input into decisions affecting their daily life and productive activities. The Directorate for the Organization and Development of Co-operatives, the unit within the Ministry of Agriculture responsible for co-operativization, lacked qualified staff. However, it was able to use external aid to set up co-operative centres, promote animal traction, introduce improved agricultural techniques and train personnel in co-operative management.

Co-operatives in the United Republic of Tanzania have a long history. Before it became independent in 1961, freely-formed marketing co-operatives

bought agricultural products and provided production inputs in rural areas. The government encouraged the formation of marketing co-operatives after independence and tried to adapt them to the needs of an independent country in the hope that they would be a vehicle for spreading development in backward regions and also as a means of getting rid of exploitative private traders who acted as middlemen between producers and consumers. This led to the establishment of about 2.500 co-operative societies in Tanzania by 1974. But mismanagement sapped the strength of the societies "and the rural elite became the main beneficiary of the societies' activities."14/ The handling and marketing costs rose at the expense of the real incomes of agricultural producers.

In order to arrest the declining trend of agricultural production, the government adopted the New National Agricultural Policy in 1983 with the following components: The National Food Strategy (1984), the Export Crop Packages - A Framework for Action (1984), and the Price Policy Recommendations (1985). The marketing co-operatives, which had been supplanted by crop authorities in the early 1980s, were revived and given a new lease of life under the new policy framework. They were given authority to collect crops locally and sell them to marketing boards, crop authorities and directly to processing factories. The co-operative unions had transferred to them the transport and other facilities of the crop authorities at the regional level. The co-operative unions and the primary societies of the villages could also engage in inter-village and inter-district trade within a region, while the distribution of crops to distant, deficit areas remained the domain of marketing boards and crop authorities. This experimentation regarding the domain or area of responsibility of the different agricultural institutions -

co-operatives, crop authorities and marketing boards did not enhance the efficiency and productivity of any of them.

In Burkina Faso, a tradition of co-operation and community work among "Naam" groups has been revived and turned into development-oriented organizations. The main purpose of "Naam" groups is to take full advantage of employment opportunities during the dry season when the high level of underemployment accounts for much of peasant poverty and youth migration to urban areas.

The groups engage in such income-generating activities as vegetable gardening, stock farming, handicrafts, millet milling, grain storage, and the production and sale of agricultural equipment. They also participate in environmental protection and restoration activities: the construction of dams and dykes, anti-erosion works, wells and afforestation projects. The groups have a savings fund financed through members' subscription and receipts from income-generating activities.

An innovative skill-promotion activity has also been initiated by "Naam" groups. More educated members possessing a certain technique or technology establish a mobile "labour-yard" school to teach the skill to other groups.

The noticeable improvements in employment, income and socio-economic security in villages covered by "Naam" groups has had a strong demonstration effect on neighbouring countries. The "Naam" movement has spread into Chad, Mali, Mauritania, Niger and Senegal. This grass-roots movement in the rural areas of these African countries is gaining momentum, with the support of United Nations' agencies and organizations, as well as non-governmental, local and international organizations.

In the Lao People's Democratic Republic, the agricultural co-operative movement was an important component of the government's policy of increasing agricultural production and productivity, for diversifying agriculture for purposes of both domestic consumption and exports and for achieving self-sufficiency in food, which implied the setting-up of a six-month rice reserve for food security purposes.

To establish a modern co-operative movement, the government built upon and adapted the time-honoured, traditional practice of Laotian families offering mutual help in cultivating the land (called "Samakhi"). In 1978, the Lao People's Revolutionary Party issued guidelines for agricultural development, including the reorganization of the co-operative movement.[15/] The Government's enabling legislation, the "Resolution on the Collectivization of Agriculture" of 1978 laid down the basic principles of the organization of co-operatives and defined the tasks and objectives of the co-operative movement and its internal relations, such as membership, land ownership and the main features of joint farming.

The government, through the Co-operative Department at the central, provincial, district and local levels of the Ministry of Agriculture, Irrigation and Co-operatives, provides the movement with financial and technical assistance and a pool of farm machinery for which the co-operatives make payment. Some co-operatives own their own tractors. However, the machinery has not been in quantities large enough to effect much change in production technologies: the buffalo remains the main source of drought power and manual work still predominates in agricultural production.

The movement encourages participation at all levels. The Department of Agricultural co-operatives has branches at the provincial, district and local levels which prepare progress reports every six months and submit them to the next higher level. The Department makes important development decisions and also allocates funds. However, the provincial authorities also allocate some of the resources, especially credits and loans, and they, together with the district authorities, participate in the preparation of production plans. The structure of the agricultural co-operatives ranges from the basic unit, at the village level, to provincial and national organizations.

At the local level, work is organized collectively and income is distributed accordingly, rather than joint farming and joint ownership of both land and the means of production. Most of the co-operatives cultivate the staple food, rice, but in the 1980s, some diversified into other crops, for both domestic use and exports, for example, corn, tobacco, coffee and sugar cane and a few others into vegetables. The work performed by each person or household is classified according to three categories of quality and registered on the basis of a 12-point system. Points accumulated by members are used for calculating individual or family incomes. Income distribution is, as a rule, in kind mostly in the form of rice, after deducting from the total value of production the costs for production materials, spare parts bought and hired, machine work, land tax (5-6 per cent of the total output) and reserve fund of 7 per cent for the development fund and the social fund. The remaining percentage is the members' income which is distributed between the wage fund (70 per cent) and subsidies for old and sick people and children (30 per cent). The wage payment is made yearly after the harvest. Some co-operatives provide interim cash income and advance payments to their members to tide them over at difficult times.

In addition to the co-operatives' joint activities, every co-operative family engages in some small-scale production, such as the cultivation of fruits and vegetables and the raising of livestock, including pigs, goats, sheep and poultry for family consumption and for sale on the free market. The government encourages this side activity of the co-operatives and has set up, within the Ministry of Agriculture, a body to deal with matters relating to household farming activities of co-operative members, including the production and marketing of produce.

Moreover, to keep families occupied during the off-season, the government promoted the pursuit of non-agricultural, handicraft activities, such as weaving and the making of agricultural and processing tools and equipment.

In addition, the agricultural co-operatives are looked upon as agents of rural development. Some have built schools and dispensaries for their members.

Usually there is one co-operative for each village[16/], with an average land size of about 60 ha., the minimum size being 25-30 ha. and the maximum 80-100 ha. An average of 55 member families cultivates a co-operative plot, with the smaller co-operative having 10-20 families and the largest 100 families. The agricultural co-operatives are managed by elected leaders. Every co-operative has a Board of Directors made up of 3-5 members, headed by a chairman, elected for a 3-year term by the supreme body, with 2 vice-chairmen, one of them in charge of farming and the other in charge of finances. The Board of Directors meets every week and evaluates the work done during the previous week and determines the work for the coming week. The general assemblies also elect Control Committees meet every six months. Each

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Control Committee has 3-5 members, and has two supervisors, one in charge of farming and the other in charge of finances.

There was a rapid growth of the co-operative movement in the late 1970s with the result that about 50 per cent of all families had joined by 1979. However, problems such as lack of financial resources, lack of experience in joint production, heavy taxation of co-operatives and the government's demand that a large proportion of the staple food, rice, had to be delivered to the government at fixed and lower prices caused the momentum of the movement to slacken, and a decrease in the number of registered co-operatives and in co-operative, agricultural production by 1980. The government rectified these deficiencies by price and tax reforms. By 1984, the number of co-operatives had almost doubled compared with 1981, rising from 1351 (1981) to 2546 (1984) and covered about 38 per cent of the total agricultural land with a membership constituting about 28 per cent of the total agricultural population, with widely differing proportions for the different districts and localities.

In order to get the co-operatives to sell to the government for the building of central stocks for food security, the government raised the procurement prices in the 1980s and the price of rice was set at only 5-10 per cent below the free market price. The timely correction of such inequities contributed to making the co-operative movement in the Lao People's Democratic Republic what appears to be a success story.

In Nepal, the co-operative movement suffered an opposite fate. The establishment of co-operatives in 1976 by the government of Nepal under its "Sajhas" programme was meant to increase agricultural production and raise the living standard of farmers through the provision of such services as loans for

small farmers, the supply of inputs, the marketing of the agricultural products, sale of essential products such as sugar, kerosene and rice, to villagers and the mobilization of rural savings. These diverse functions overtaxed the already insufficient management capability of the system and inefficient management forced the government to place the co-operatives under the Agricultural Development Bank after only a few years of operation.

4. State Farms

In Mozambique, the state agricultural sector was built upon the farms and estates abandoned by colonial settlers after independence in 1977. During the 1980s, the government gave pre-eminence to the state farm sector in the allocation of both financial and technical resources, on the assumption that "state farms could contribute rapidly and regularly to export production, provide inputs to local agro-industries and safeguard urban consumption. The sector was seen as the dominant and dynamizing element in development, in modernizing agriculture and in providing technical services to the co-operative and the small family farmer sectors".17/

The state farm sector was bedevilled by such factors as the lack of trained manpower, and weak supply and service systems leading to low levels of productivity. Consequently, the sector could not fulfill the objectives in increasing both export cash crops and urban food supply in the 1980s. Nor was it able to offer assistance to other sectors on a large scale. Rather, it competed with them in the allocation of scarce public resources. It also used capital-intensive methods of production in a labour-surplus economy. Moreover, production targets for crops established in physical units by the central authorities made farm managers more interested in fulfilling physical targets than in minimizing production costs.

B. Supporting institutions

1. Agricultural research and extension services

Public, private and international agricultural research institutes have been established in the developing world, including many least developed countries, to develop new technology and promote its diffusion and efficient application on farms. Much progress has already been made by the research institutes in the production of new, improved, higher-yielding and disease-resistant varieties of seeds and strains. The main problems in this area in the various countries have been the distribution and marketing of the seeds and the shortage of extension services.

In West Africa, institutes conducted research into the agronomic potential and the nutritional value of roots, tubers and plaintains. Improvement of the production of these crops is crucial because of their effective and potential contribution to national self-reliance in food and food security at both national and household levels. In some countries, roots, tubers and plantains are estimated to constitute more than 25 per cent of the calories consumed by the population, for example Benin (35 per cent), Burundi (27 per cent), the Central African Republic (53 per cent), Mozambique (43 per cent), the United Republic of Tanzania (33 per cent) and Uganda (50 per cent).18/

Research was conducted into improving post harvest handling and storage, marketing and processing of these foodstuffs. Furthermore, research and development efforts were devoted to meeting consumer preferences regarding convenience and price while ensuring renumerative prices to farmers and improving yields. This consumer research was meant to counter the trend of declining market demand for roots and tubers, especially in urban areas where

there was greater availability and relatively lower prices of imported cereals, particularly wheat, which offered greater convenience in preparation. This was also meant to reduce the soaring cereal import bill of these countries. Already "wheatless" bread using flour made from cassava and another made from traditional foodstuffs, such as sorghum and millet, have been developed and are being tested in some countries, including the Sudan.

On the production side, the International Institute of Tropical Agriculture at Ibadan, Nigeria, has developed higher-yielding, more disease-resistant varieties of cassava and methods for easier packing and distribution of these improved strains to other African countries. Demand for it by farmers in other countries including the Sudan and the United Republic of Tanzania has been enthusiastic and high.

Other traditional crops which are benefitting from the spate of research efforts are sorghum and millet. The declining trend in consumption observable with cassava was also noticeable with sorghum and millet[19/] in some West African countries. To reverse the declining trend in the consumption of traditional foodgrains, research institutes have developed new higher-yielding, disease-resistant varieties of sorghum and millet in order to increase production and to substitute for imported wheat and rice. In Burkina Faso, for example, local research institutes and the International Crop Research Institute for the Semi-Arid Tropics (ICRISAT) have developed such strains and have made them available to farmers.

To ensure that research results and appropriate agricultural technologies are applied on farms, an innovative extension system, developed in India in the 1970s and which uses farmers who benefit from regular extension agents as "informal" extension workers who teach other farmers and

provide a feedback to the original extension workers was adopted in sub-Saharan Africa and Nepal. This extension system, dubbed training and visit, sends out trained extension workers who visit "contact" farmers every fortnight and provide information suited to local conditions, such as the right time to plant and to weed, the choice of seeds, the appropriate chemical fertilizer to apply and the correct spacing of plants. The "contact" farmers pass the knowledge gained on to other farmers and report farmers' problems and difficulties back to the trained extension workers who in turn report these problems to research scientists who try to find the solutions to be sent back to the farmers. This use of local knowhow benefits all parties and encourages participation by the farmers.

This training and visit system of extension services is being used in some least developed countries, for example, Ethiopia, Malawi, Burkina Faso and the Yemen Arab Republic to train women as "contact" extension agents. Since women produce a large proportion of the food in sub-Saharan Africa, the training of women farmers in modern methods of cultivation, backed by the provision of credit and inputs, such as fertilizers and new high-yielding varieties of seeds, is part of the food security strategy of some countries in the region.

In the least developed countries in Asia and the Pacific, the agricultural research institutions were concerned not just with traditional crops, such as rice, maize and wheat but also with diversification and the introduction of new crops as import substitutes and for export. For example, in Bangladesh, extension agents encouraged the production of oilseeds, pulses and potatoes. Wheat production was also encouraged to reduce dependence on rice. In Bhutan, research and extension work encouraged the expansion of the

area devoted to fruits and vegetables production. Winter cropping of vegetables and double cropping of rice were taught to farmers. In Nepal, too, winter planting of vegetables and double cropping of rice were encouraged. In Myanmar, extension agents taught farmers improved cropping practices, distributed quality seeds, chemicals and fertilizers and the proper use of irrigation waters and embankment facilities. In the Lao People's Democratic Republic, research and extension services encouraged the production of cash crops such as coffee, sugar, cotton and tobacco as well as foodstuffs such as maize, roots and tubers, fruits and vegetables. In Vanuatu, extension agents propagated the cultivation of potatoes, fruits and vegetables in the 1980s.

Agricultural research and extension institutions in Nepal were typical of those in most least developed countries. Agricultural research in Nepal is administered by the Department of Agriculture of the Ministry of Agriculture. The research centres are dispersed throughout the country, with centres in all the regions of the country. They concentrate on cereal crops or cash crops for seed multiplication. The development and testing of crop production technologies specific to the different climatic areas of the hills was emphasized during the 1980s.

In order to make use of local know-how of agricultural conditions, the Ministry of Agriculture in Nepal employed agricultural assistants, chosen from among progressive farmers and retired military men, at the village level. The agricultural assistants received additional training and worked as part-time extension agents in areas adjacent to their homes for a nominal fee of Rs. 50-150 a month. These agricultural assistants, who are supervised by junior technical assistants who have received a year's training, have been found to be a cost-effective way of providing extension at the farm level.

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Another method of providing affordable extension services in Nepal, especially in the Terai area, is the training and visit system (mentioned above).

In the hilly parts of Nepal, difficulties of movement limited the use of the training and visit system. So agricultural service centres were set up and became the focal points for providing advisory services, inputs, demonstrations, the training of leader farmers and for mini-kit distribution.

Problems of the extension service system in Nepal include shortage of trained extension personnel and lack of motivation in a bureaucracy. Aid from external aid agencies helped in improving the situation during the late 1980s. For example, the IDA - financed Agricultural Manpower Development Project tackled the problems of increasing the number of trained extension agents and raising the quality of training programmes of the existing pre - and in-service training institutes.

C. Summary and conclusions

In order to improve the living conditions of the 70 per cent or more of the economically active population engaged in agriculture in the least developed countries, the governments in these countries tried to establish or revamp institutions in the agricultural sector - reform of land tenure systems, resettlement of dispersed rural people , co-operative farming, state farms and research and extension - in the hope that they would lead to increased agricultural production and productivity and enhance food security and even in some cases to increase exports.

In spite of these efforts, the results were in most cases not commensurate with the resources devoted to the tasks.

First, external forces such as drought, locust infestations, floods, hurricanes and internal strife affected production in several of these countries. Second, budget deficits and balance of payments problems forced governments to reduce the provision of agricultural inputs to settlements, co-operatives and state farms. Third, the falling into disfavour of government subsidies to parastatals which supplied inputs to farmers also undermined the efforts of the institutions.

Fourth, some of the institutions were hurriedly set up without plans for providing supplementary inputs on an on-going basis. In sub-Saharan Africa where many of the governments professed socialism, the desire to build African socialism, noble as it was, was not carried out with full knowledge of the inputs and ancillary services needed by the resettlement farms and the co-operatives with the result that these institutions were starved of inputs and services the cultivators needed to increase production and at the same time enjoy a modicum of living. However, the revival of the African tradition of co-operation and community work on the farm and in imparting of handicrafts skills in some Sahel countries as well as the modernization of communal land use system in a few African countries and the co-operative movement in the Lao People's Democratic Republic seemed to have been success stories.

Fifth, powerful, vested interests used every opportunity ~~loophole and chicanery~~ to thwart the intent of the land tenure laws.

The ongoing research and extension services showed positive results in several countries.

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Notes

1/ The data and facts relating to Bangladesh are taken from M.A. Kashem: Land Reform in Bangladesh in FAO: Land Reform, Land Settlement and Co-operatives, No. 1/2, 1988. Rome 1989, pp. 63-68.

2/ M.A. Kashem: loc. cit., p. 65.

3/ M.A. Kashem: loc. cit., p. 66.

4/ Economist Intelligence Unit: Bangladesh Country Report, No. 3, 1989, p. 13.

5/ Economist Intelligence Unit: Country Profile: Pakistan, Afghanistan, 1987-88, p. 53.

6/ This section and the data are based on Getachew Woldemeskel: The Consequences of Resettlement in Ethiopia in African Affairs. The Journal of the Royal African Society, vol. 88, No. 352, July 1989, pp. 361-374.

7/ G. Woldemeskel: loc. cit., p. 361.

8/ G. Woldemeskel: loc. cit., p. 373.

9/ This section is based on Fina Tarp: Agrarian Transformation in Mozambique in F.A.O. Land Reform, Land Settlement and Co-operatives, No. 1/2, 1984, p. 8.

10/ See J. Lecaillon, C. Morrisson, H. Schneider and E. Thorbecke. Economic Policies and Agricultural Performance of Low-Income Countries (OECD Development Centre Studies, Paris, 1987), p. 91.

11/ Emil Katona: Planning and Policy Making: Factors Affectng the Recovery of Agriculture in Tanzania. Studies on Developing Countries, No. 125 of the Institute for World Economics of the Hungarian Academy of Sciences, Budapest, 1988, p. 21.

12/ J. Lecaillon, et al., p. 93.

13/ The data are from F. Tarp: Loc. cit, pp. 5 and 7.

14/ E. Katona: op. cit, p. 23.

15/ This part is based on Janos Juhasz: The Reorganization of the Agricultural Sector of the Lao People's Democratic Republic through Production Co-operatives in F.A.O., Land Reform, Land Settlement and Co-operatives, 1986, No. 1/2, Rome 1986, pp. 61-72.

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16/ The data are taken from J. Juhasz: loc. cit., pp 65-66.

17/ F. Tarp: loc. cit. pp 5 and 7.

18/ FAO: Strategies and Requirements for Improved Introduction of Roots, Tubers sand Plantains (COAG/87/9, January 1987), Table 4, p. 18

19/ Several factors were responsible for this trend: the failure of food production, using old-fashioned tools to keep pace with population growth, poor transportation network, making farm produce inaccessible to towns and villages, the relatively easy accessibility of imported cereals in urban areas, the drift to towns with changing tastes and the ease of preparing meals out of wheat and rice compared to using sorghum and millet, giving more time to women for other household activities.

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Table 1. Least developed countries: Importance of the agricultural sector, 1965-87

Region and country	Percentage of the economically active population in agriculture			Percentage share of agriculture in gross domestic product			Percentage share of agricultural exports in total exports		Percentage share of total imports financed by agricultural exports		Percentage share of food imports in total imports	
	1970	1980	1987	1965	1981	1985	1980	1986	1980	1986	1965	1986
Africa												
Benin	80.9	70.2	64.1	59	42	49	76	53	19	16	18	16
Botswana	85.5	70.3	65.2	34	15	4	10	9	7	11		
Burkina Faso	88.3	86.7	85.1	53	38	45	79	69	33	22	23	20
Burundi	93.5	92.7	91.7	...	63	58	85	94	36	77	16	12
Cape Verde	64.1	51.7	45.8	...	15	...	25	19	1	1		
Central African Rep.	82.9	72.4	65.7	46	35	41	51	38	67	42	13	16
Chad	90.2	83.3	77.4		46		75	78	67	65	13	17
Comoros	86.7	83.0	80.3	42	44	...	74	60	32	30		
Djibouti	...	...	...	...	5	...		69		62		
Equatorial Guinea	75.0	65.8	58.6	...	44	...	94	85	63	40	6	22
Ethiopia	85.0	79.8	76.2	58	60	48	59	38	17	17		
Gambia	86.6	84.0	81.9	...	30	28	9	7	9	9	...	12
Guinea	85.2	80.7	76.2	...	48	40	54	68	11	25		
Guinea Bissau	84.1	82.3	79.9	...	50	...	57	93	6	5		
Lesotho	89.9	86.2	81.7	65	23	21	85	93	57	8	15	7
Malawi	90.5	83.3	77.7	50	45	37	90	84	46	38	20	13
Mali	89.2	85.5	82.3	...	36	50	20	10	15	17	9	25
Mauritania	84.8	69.3	66.1	32	24	34	39	39	16	8	17	...
Mozambique	86.4	84.5	82.5	...	43	35	24	20	15	21	12	18
Niger	94.3	91.1	88.5	68	45	46	87	86	32	34	12	12
Rwanda	93.7	92.8	91.8	75	43	40	70	43	108	27		
Sao Tome and Principe	...	...	...	...	31	...	30	42	18	29	17	32
Sierra Leone	75.5	69.6	64.5	34	30	45	108	85	37	22	31	15
Somalia	79.4	75.5	71.8	71	32	58	79	94	33	44	23	21
Sudan	77.0	71.1	63.6	54	33	35	36	52	15	31	15	23
Togo	76.7	73.0	70.6	45	28	32	95	92	73	131	7	6
Uganda	89.3	85.9	82.4	52	77	76	69	86	32	35	...	4
United Rep. of Tanzania	90.4	85.6	82.3	46	52	59						

Table 1 (continued)

Region and country	Percentage of the economically active population in agriculture			Percentage share of agriculture in gross domestic product			Percentage share of agricultural exports in total exports		Percentage share of total imports financed by agricultural exports		Percentage share of food imports in total imports	
	1970	1980	1987	1965	1981	1985	1980	1986	1980	1986	1965	1986
Latin America and Carbbean												
Haiti	74.4	70.0	65.7	...	33	...	62	35	40	16	25	15
Asia and the Pacific												
Afghanistan	66.1	61.0	56.6	...	44	...	45	39	32	23	17	10
Bangladesh	81.4	74.8	70.5	53	47	47	29	20	12	6		27
Bhutan	94.1	92.4	91.3	...	99	...	...	...	...	...	...	...
~~Burma~~ Myanmar	59.1	53.0	48.8	35	46	48	40	51	17	55	15	6
Democratic Yemen	50.8	41.1	34.4	...	10	...	4	1	3	1	19	11
Kiribati	...	...	...	...	56	...	...	6	...	2	...	...
Lao People's Dem. Rep.	78.9	75.7	72.8	...	50	...	11	29	2	15	32	...
Maldives	...	...	...	...	100	...	...	...	...	...	..	...
Nepal	93.6	93.0	92.1	65	63	...	33	25	15	14	22	10
Samoa	...	...	...	...	56	...	77	...	21	...	...	...
Tuvalu	...	...	...	...	...	...	...	...	...	...	...	...
Vanuatu	...	...	...	...	57	...	44	47	20	14	...	...
Yemen	76.4	68.8	64.6	...	29	34	49	80	1	1	40	26
Developing market eco.	66.3	60.2	56.3									
Developing market eco.	13.0	8.3	6.2	5		3					19	10
Centrally planned eco.	64.2	60.3	56.6									

Table 1 (continued)

Region and country	Percentage of the economically active population in agriculture			Percentage share of agriculture in gross domestic product			Percentage share of agricultural exports in total exports		Percentage share of total imports financed by agricultural exports		Percentage share of food imports in total imports	
	1970	1980	1987	1965	1981	1985	1980	1986	1980	1986	1965	1986
All developing countries	71.1	65.7	61.4	30		19				17	10	
All developed countries	18.7	12.7	9.5									
World	55.0	50.8	47.8									

Source: FAO, Production Yearbook 1987, Vol. 41 and The State of Food and Agriculture, 1981 and 1987-88; World Bank: World Development Report 1988.

Table 2. Least developed countries: Growth rate of agriculture and food production, 1961 - 1988

Region and Country	AGRICULTURE						FOOD					
	Total			Per capita			Total			Per capita		
	1961-70	1970-80	1980-88	1961-70	1970-80	1980-88	1961-70	1970-80	1980-88	1961-70	1970-80	1980-88
Africa												
Benin	3.3	3.6	5.3	0.7	0.8	2.2	2.7	3.7	4.7	0.3	0.9	1.7
Botswana	1.2	-0.3	1.5	-0.8	-2.9	-2.1	1.3	-0.3	1.5	-2.7	-2.9	-2.1
Burkina Faso	4.6	1.4	5.7	2.3	-1.0	3.2	3.8	1.1	5.5	2.3	-1.4	3.0
Burundi	5.6	2.1	3.7	3.4	-	0.9	5.6	2.2	3.5	3.4	0.2	0.6
Cape Verde	-7.3[b]	2.4	-2.1[c]	-10.2[b]	1.5	-4.2[c]	...	...	...	...	...	...
Central African Republic	0.6	2.1	0.1	-1.3	-0.1	-2.2	-	2.3	-	-1.7	0.2	-2.3
Chad	0.3	1.5	2.7	-1.9	-0.5	0.3	-0.3	1.8	2.7	-2.5	-0.2	0.4
Comoros	3.8	2.2	2.2[c]	1.5	...	...	3.8	...	-1.0	1.7	...	...
Djibouti	...	...	...	...	...	...	...	...	...	...	...	...
Equatorial Guinea	1.2	...	...	-	...	...	1.2	...	...	-	...	...
Ethiopia	2.8	0.5	1.0	0.8	-1.6	-0.8	2.7	0.5	1.2	0.8	-1.7	-0.8
Gambia	1.8	-1.7	4.3	-0.1	-4.6	1.3	1.8	-1.7	4.4	-0.1	-4.6	1.4
Guinea	2.3	1.5	0.8	0.2	-0.9	-1.6	2.3	1.5	0.8	0.2	-1.1	-1.6
Guinea Bissau	...	-0.4	6.3	...	-2.2	4.3	...	-0.4	6.3	...	-2.2	4.4
Lesotho	0.4	0.1	1.3	-1.3	-2.2	-1.5	-	0.7	1.7	-1.7	-1.6	-1.6
Malawi	3.8	3.9	1.3	1.3	0.8	-1.9	3.6	3.4	1.1	1.2	0.3	-2.1
Mali	1.7	1.2	4.1	-0.6	-1.4	1.2	1.2	0.6	4.1	-0.9	-2.0	1.3
Mauritania	2.1	-0.6	1.5	-	-3.1	-1.2	2.1	-0.4	1.5	-	-3.1	-1.2
Mozambique	1.8	-1.3	0.3	0.3	-3.8	-2.3	2.3	-0.7	0.3	0.3	-3.2	-2.3
Niger	2.9	2.4	2.4	0.1	-0.4	-0.5	2.8	2.5	2.4	0.1	-0.3	-0.5
Rwanda	4.5	3.6	0.7	1.7	0.7	-2.7	4.5	3.2	-	1.8	0.3	-3.5
Sao Tome and Principe	-1.5[b]	-3.1	-2.8[c]	-2.9[b]	-4.4	-5.5[c]	...	...	...	...	...	...
Sierra Leone	3.6	1.2	0.8	1.3	-1.4	-1.6	3.6	1.1	0.9	1.4	-1.5	-1.5
Somalia	2.8	0.6	3.3	0.7	-4.4	-0.2	2.8	0.6	3.3	0.7	-4.4	-0.2
Sudan	5.6	1.2	3.1	2.7	-1.4	0.1	5.3	2.7	3.3	2.3	0.1	0.2
Togo	7.1	1.5	1.7	4.6	-1.0	-1.3	7.1	1.5	1.4	7.2	-1.0	-1.4
Uganda	3.1	-0.5	1.2	0.8	-3.6	-2.2	3.3	1.5	1.1	1.3	-1.5	-2.3
United Republic of Tanzania	5.9	1.2	2.1	3.4	-1.8	-1.6	6.3	1.5	2.3	4.1	-1.4	-1.5
Latin America and the Caribbean												
Haiti	1.3	0.9	0.1	-1.1	-1.4	-1.8	1.4	0.9	0.5	-0.9	-1.4	-1.3

Table 2. Least developed countries: Growth rate of agriculture and food production, 1961 - 1988

Region and Country	AGRICULTURE						FOOD					
	Total			Per capita			Total			Per capita		
	1961-70	1970-80	1980-88	1961-70	1970-80	1980-88	1961-70	1970-80	1980-88	1961-70	1970-80	1980-88
Asia and the Pacific												
Afghanistan	1.3	2.0	...	-0.9	-0.5	...	1.1	2.2	...	-0.9	-0.3	...
Bangladesh	2.2	1.7	0.8	-1.1	-0.8	-1.9	2.4	2.1	0.9	-0.9	-0.5	-1.8
Bhutan	...	2.9	3.9	...	0.7	2.0	...	2.9	3.9	...	0.7	2.0
Democratic Yemen	2.0	2.8	1.3	-0.8	0.6	-1.5	1.9	3.1	1.1	-0.7	0.9	-1.7
Kiribati	...	...	...	...	...	...	...	...	...	...	...	...
Lao People's Democratic Rep.	6.1	3.2	3.3	1.8	1.1	1.0	4.2	3.3	3.3	3.6	1.0	1.1
Maldives	4.3[b]	2.2	3.4[c]	1.1[b]	-0.9	-	...	...	...	...	...	...
Mayanmar	2.1	2.4	4.7	-0.1	-	2.6	2.1	2.4	4.9	-0.1	0.1	2.8
Nepal	1.3	0.8	2.4	-0.8	-1.3	-0.2	1.3	0.8	2.8	-0.8	-1.3	-
Samoa	-2.5	1.6	-1.8[c]	-5.8	0.8	-2.7[c]	-2.5	-	...	-5.8	...	...
Tuvalu	...	...	...	...	...	...	...	...	...	...	...	...
Vanatu	2.9[b]	1.2	1.5	0.8[b]	-1.9	-2.2	...	1.3	1.5	...	-1.9	-2.1
Yemen	0.9	2.6	2.5	1.8	0.8	-0.4	0.8	3.9	2.5	-1.7	0.8	-0.4
Developing Market Economies	2.7	2.8	2.6	0.2	0.4	0.2	3.0	3.0	2.7	0.4	0.6	0.2
Africa	2.8	1.4	2.1	0.2	-1.5	-0.9	2.7	1.6	2.1	0.4	-1.3	-1.0
Latin America and the Caribbean	2.9	3.2	2.0	0.2	0.7	-0.1	3.6	3.4	2.1	0.2	0.9	-
Near East	4.5	3.1	3.1	0.7	0.8	-0.4	3.4	3.3	2.9	0.7	0.6	-0.2
Far East	2.5	2.7	3.2	0.1	0.5	0.8	2.8	2.7	3.2	0.4	0.5	0.9

Table 2. Least developed countries: Growth rate of agriculture and food production, 1961 - 1988

Region and Country	AGRICULTURE						FOOD					
	Total			Per capita			Total			Per capita		
	1961-70	1970-80	1980-88	1961-70	1970-80	1980-88	1961-70	1970-80	1980-88	1961-70	1970-80	1980-88
Developed Market Economies	2.2	2.0	0.2	1.1	1.2	-0.4	2.4	2.1	0.2	1.3	1.3	-0.5
North America	2.0	2.3	-0.4	0.8	1.2	-1.4	2.4	2.4	-0.6	1.1	1.3	-1.5
Western Europe	1.9	1.8	0.5	1.1	1.4	0.2	1.9	1.8	0.6	1.1	1.4	0.2
Oceania	4.4	1.6	2.1	2.4	0.0	0.9	5.0	2.3	1.9	3.1	0.8	0.7
Others	2.6	0.3	0.8	1.4	-1.2	-0.1	2.9	0.4	1.0	1.6	-1.1	0.1
Centrally Planned Economies	3.2	2.1	3.2	1.7	0.6	2.0	3.2	2.1	3.1	1.6	0.6	1.9
Asia	5.5	2.9	4.4	1.2	1.2	3.1	3.1	3.4	4.2	1.2	1.2	2.9
Eastern Europe and USSR	3.6	1.4	1.8	2.2	0.6	1.0	3.4	1.6	1.9	2.2	0.6	1.1
All developing countries	4.0	2.7	3.1	0.4	0.5	1.0	3.0	2.8	3.1	0.8	0.7	1.0
All developed countries	3.0	1.8	0.7	1.6	1.0	-	2.9	1.8	0.7	1.8	1.1	-
World	3.0	2.4	2.0	0.9	0.5	0.2	3.0	2.2	1.9	1.0	0.6	0.2

Source: Department of International Economic and Social Affairs of the United Nations, based on data in Food and Agriculture Organization of the United Nations (FAO) Production Yearbooks, Vol. 26, 1972 and Vol. 35, 1981

Conclusion

The preceding review of institutional development in least developed countries is first of all a reminder of the various ideological and political principles that have influenced policies in these countries. Ambitious aspirations to provide uniform and universal social services which governments were economically unable to deliver have often tended to undermine their authority and to call forth alternative solutions to the essential needs of the population.

As the report indicates, the overcentralization of a decision-making process in many least developed countries, having believed it to be a guarantee of more fair distribution of social services or national output has substituted, in fact, the initiative of institutions in dealing with problems beyond their formally-established operational routine. Also, such centralization has tended, in the long run, to undermine the effectiveness and objectivity of the central authorities' decisions because of the weakness of a feedback mechanism. On the whole, it has resulted in the limited flexibility of institutions and, in many cases, in the inconsistency of the institutional goals and the real needs of the least developed countries.

However, the findings also report a tendency to make institutions more flexible in responding to public needs. This involves decentralization, participation, and greater reliance on incentives.

Such approaches have already borne some positive results in primary health care and education in some of the least developing countries. Given more operational freedom, institutions in those sectors have been able to mobilize local resources, and in other cases to overcome some of the institutional barriers, as in the case of new approaches to primary health.

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Experiences of the Patan Hospital in Nepal, the Mvumi Hospital in Tanzania, the village health committees in Malawi, or a distance teaching method applied by a group of African least developed countries are a plainly visible proof of the effectiveness of some of these new strategies.

The study does not support any universal criticism of implanted institutions. These are often closely associated with the modernization process, but as decades of experience suggest may not suffice. Institutions such as the Grameen Bank have made distinct contributions in the mobilization of initiative and savings. This is not to say that governments could replicate it, as it rests on a trust that many governments do not command but would first have to earn.

Implanted institutions , as it was found, can perform successfully under given socio-economic conditions of the least developed countries if the assignments received by them are consistent to their very nature. This conclusion is supported, in particular, by the whole experience of the Botswana Development Corporation, as well as of other formal financial institution in many developing countries.

With regard to developmental problems of the least developed countries, especially economic problems, the study suggests that implanted institutions, adjusted to specific conditions and concrete tasks, may be both efficient and effective and may solve a developmental problem with less costs for a society.

However, the report is not advocating for an adjustment of all implanted institutions. Quite the contrary. It considers that specific problems of the least developed countries should be addressed through establishing specific institutions, such as the Grameen Bank, which main function should be the development of new patterns of social relations. Such an approach, as the

findings of the report indicates, will allow the building of a bridge between the formal and informal sectors and overcome some obstacles to a further consolidation of national economies. After fulfilling their tasks, these institutions, could be dismantled or integrated into existing formal institutions. Also, the establishment of an additional layer of institutions with specific developmental tasks on a temporal basis could be less costly than imposing unusual functions on existing formal institutions which will either undermine or run into conflict with their original functions.

In many least developed countries there is a great deal of structural change in ownership, although governments have naturally been more anxious to privatize loss-making enterprises than profitable ones. Nevertheless, a reform of parastatals has resulted in deinstitutionalization of some of them or in reviewing and redistributing functions between public and private institutions.

Macro- and micro-management of institutions has also been undergoing dramatic changes in many least developed countries. At the macro-level, there is a noticeable drift away from direct administrative methods towards indirect ones.

At the micro-level, the most profound change has been the recognition of the importance of the institutional management in itself. Many least developed countries have organized management courses at which local personnel has been trained and introduced to managerial techniques and procedures. Joint venturs and non-governmental organizations have been also heavily involved in training local junior personnel applying such methods as "job training" and "learning by doing".

Another new trend in institutional development of the least developed countries identified has been a strengthening of functional and other linkages, both horizontal and vertical, between the institutions of a country. For example, in the agricultural sector, there has been a combined process of decentralization and diversification. If the former is expected to free producers in terms of production choice, price formation and marketing their products, the latter aims at the strengthening of support for producers (the provision of rural credit, agricultural inputs and other services).

A revival of creative initiative at the grass-root level and attempts to utilize a potential of indigenous factors have also been registered. The latter has brought some positive result as formal medical institutions have learned and applied the methods and knowledge of traditional medicine.

The institutions touched upon in this report do not cover the whole of the societies in the LDC category, and they leave out the most important institution of all, namely government itself.

Taken altogether they register much disenchantment and failure. Much has been tried in the poorest countries and so often to no avail, sometimes because of natural disaster, sometimes because of man-made disaster, and sometimes for sheer lack of support at the other end. But the story is not all gloom: much has been learned and there is a wave of creative initiatives at the grass-roots level and a new phase of institutional development ahead.

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